DVD Player

DVP3140，DVP3142(K)

Service

Service

Service

DVP3140/37

DVP3142/12/51/55

DVP3142K/55

Service Manual

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CLASS 1 LASER PRODUCT

Published by TCL-HY 0701 Service Audio Printed in The Netherlands Subject to modification

GB 3139 785 32450

Version 1.0

PHILIPS

Technical Specifications

TV standard (PAL/50Hz) (NTSC/60Hz)

Number of lines	625	525
Playback	Multi standard	(PAL/NTSC)

Video performance

Video DAC	12 bit, 108MHz
YPbPr:	0.7Vpp ---- 75 ohm
Video output	1Vpp ----- 75 ohm
RGB(SCART)	0.7Vpp ---- 75 ohm

Video format

Digital Compression	MPEG 2 for DVD,SVCD MPEG 1 for VCD DivX®

DVD	**50Hz**	**60Hz**
Horiz resolution	720 pixels	720 pixels
Vertical resolution	576lines	480 lines

VCD	**50Hz**	**60Hz**
Horiz. resolution	352 pixels	352 pixels
Vertical resolution	288lines	240 lines

Audio format

Digital	**MPEG/AC-3/ PCM**	**Compressed Digital** **16, 20, 24bits** fs, 44.1, 48, 96KHz
	MP3(ISO 9660)	96,112,128,256kbps & variable bit rate fs,32, 44.1,48 kHz

Analogue Sound Stereo
Dolby surround compatible downmix from Dolby Digital multi-channel sound

Audio performance

DA converter	24bits, 192KHz	
DVD	fs 96kHz	4Hz----44kHz
	fs 48kHz	4Hz----22kHz
SVCD	fs 48kHz	4Hz----22kHz
	fs 44.1kHz	4Hz----20kHz
CD/ VCD	fs 44.1kHz	4Hz----20kHz
Signal-Noise (1kHz)		>90dB
Dynamic Range (1kHz)		>80dB
Cross talk (1kHz)		>70dB
Distortion/Noise (1kHz)		>65dB
MPEG MP3		MPEG Audio L3

Connections

Scart Oupput	Euroconnector
YpbPr output	Cinch 3x
Video output	Cinch(yellow)
Audio output (L+R)	Cinch (white/red)
Digital output	1 coaxial IEC60958 for CDDA/ LPCM IEC61937 for MPEG1/2, Dolby Digital

Cabinet

Dimensions (w X h X d)	360 x 38 x 209 mm 360 x 37 x 209 mm (Only for DVP3142K/XX)
Weight	Approximately 1.35 kg

Power consumption

Power supply Rating	110V-240V; 50/60HZ
Power consumption	<10W
Power consumption in standby mode	<1W

Specifications subject to change without prior notice.

Safety instruction, Warning & Notes

Safety instruction

1. General safety

Safety regulations require that during a repair:

. Connect the unit to the mains via an isolation transformer.

. Replace safety components indicated by the symbol ⚠, only by components identical to the original ones. Any other component substitution (other than original type) may increase risk of fire or electrical shock hazard.

Safety regulations require that after a repair, you must return the unit in its original condition. Pay, in particular, attention to the following points:

. Route the wires/cables correctly, and fix them with the mounted cable clamps.

. Check the insulation of the mains lead for external damage.

. Check the electrical DC resistance between the mains plug and the secondary side:

1) Unplug the mains cord, and connect a wire between the two pins of the mains plug.
2) Set the mains switch the "on" position (keep the mains cord unplug).
3) Measure the resistance value between the mains plug and the front panel, controls, and chassis bottom.
4) Repair or correct unit when the resistance measurement is less than 1MΩ.
5) Verify this, before you return the unit to the customer/user (ref. UL-standard no. 1492).
6) Switch the unit "off", and remove the wire between the two pins of the mains plug.

2.Laser safety

This unit employs a laser. Only qualified service personnel may remove the cover, or attempt to service this device (due to possible eye injury).

Laser device unit

Type : Semiconductor laser GaAlAs

Wavelength : 650nm (DVD)

: 780nm (VCD/CD)

Output power : 7mW (DVD)

: 10mW (DVD /CD)

Beam divergence: 60 degree

Note: Use of controls or adjustments or performance of procedure other than those specified herein, may result in hazardous radiation exposure. Avoid direct exposure to beam.

Warning

1.General

. All ICs and many other semiconductors are susceptible to electrostatic discharges (ESD). Careless handing during repair can reduce life drastically. Make sure that, during repair, you are at the same potential as the mass of the set by a wristband with resistance. Keep components and tools at this same potential. Available ESD protection equipment:

1) Complete kit ESD3 (small tablemat, wristband, connection box, extension cable and earth cable) 4822 310 10671.
2) Wristband tester 4822 344 13999.

. Be careful during measurements in the live voltage section. The primary side of the power supply , including the heat sink, carries live mains voltage when you connect the player to the mains (even when the player is “off”!). It is possible to touch copper tracks and/or components in this unshielded primary area, when you service the player. Service personnel must take precautions to prevent touching this area or components in this area. A “lighting stroke” and a stripe-marked printing on the printed wiring board, indicate the primary side of the power supply.

. Never replace modules, or components, while the unit is “on”.

2. Laser

. The use of optical instruments with this product, will increase eye hazard.

. Only qualified service personnel may remove the cover or attempt to service this device, due to possible eye injury.

. Repair handing should take place as much as possible with a disc loaded inside the player.

. Text below is placed inside the unit, on the laser cover shield:

CAUTION: VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN, AVOID EXPOSURE TO BEAM.

Notes: Manufactured under licence from Dolby Laboratories. The double-D symbol is trademarks of Dolby Laboratories, Inc. All rights reserved.

Notes

Lead-Free requirement for service

INDENTIFICATION:
Regardless of special logo (not always indicated)

One must treat all sets from 1.1.2005 onwards, according next rules.

Important note: In fact also products a little older can also be treated in this way as long as you avoid mixing solder-alloys (leaded/ lead-free). So best to always use SAC305 and the higher temperatures belong to this.

Due to lead-free technology some rules have to be respected by the workshop during a repair:

- Use only lead-free solder alloy Philips SAC305 with order code 0622 149 00106. If lead-free solder-paste is required, please contact the manufacturer of your solder-equipment. In general use of solder-paste within workshops should be avoided because paste is not easy to store and to handle.
- Use only adequate solder tools applicable for lead-free solder alloy. The solder tool must be able
  - o To reach at least a solder-temperature of 400°C,
  - o To stabilize the adjusted temperature at the solder-tip
  - o To exchange solder-tips for different applications.
- Adjust your solder tool so that a temperature around 360°C – 380°C is reached and stabilized at the solder joint. Heating-time of the solder-joint should not exceed ~ 4 sec. Avoid temperatures above 400°C otherwise wear-out of tips will rise drastically and flux-fluid will be destroyed. To avoid wear-out of tips switch off un-used equipment, or reduce heat.
- Mix of lead-free solder alloy / parts with leaded solder alloy / parts is possible but PHILIPS recommends strongly to avoid mixed
  solder alloy types (leaded and lead-free). If one cannot avoid, clean carefully the
  solder-joint from old solder alloy and re-solder with new solder alloy (SAC305).
- Use only original spare-parts listed in the Service-Manuals. Not listed standard-material (commodities) has to be purchased at external companies.
- Special information for BGA-ICs:
  - always use the 12nc-recognizable soldering temperature profile of the specific BGA (for de-soldering always use highest lead-free temperature profile, in case of doubt)
  - lead free BGA-ICs will be delivered in so-called 'dry-packaging' (sealed pack including a silica gel pack) to protect the IC against moisture. After opening, dependent of MSL-level seen on indicator-label in the bag, the BGA-IC possibly still has to be baked dry. This will be communicated via AYS-website.
  Do not re-use BGAs at all.
- For sets produced before 1.1.2005, containing leaded soldering-tin and components, all needed spare-parts will be available till the end of the service-period. For repair of such sets nothing changes.
- On our website:
  www.atyourservice.ce.Philips.com

You find more information to:

BGA-de-/soldering (+ baking instructions)
Heating-profiles of BGAs and other ICs used in Philips-sets

You will find this and more technical information within the "magazine", chapter "workshop news".

For additional questions please contact your local repair-helpdesk.

Mechanical and Dismantling Instructions

Dismantling Instruction

The following guidelines show how to dismantle the player.
Step1: Remove 5 screws around the Top Cover, then remove the Top Cover (Figure 1).

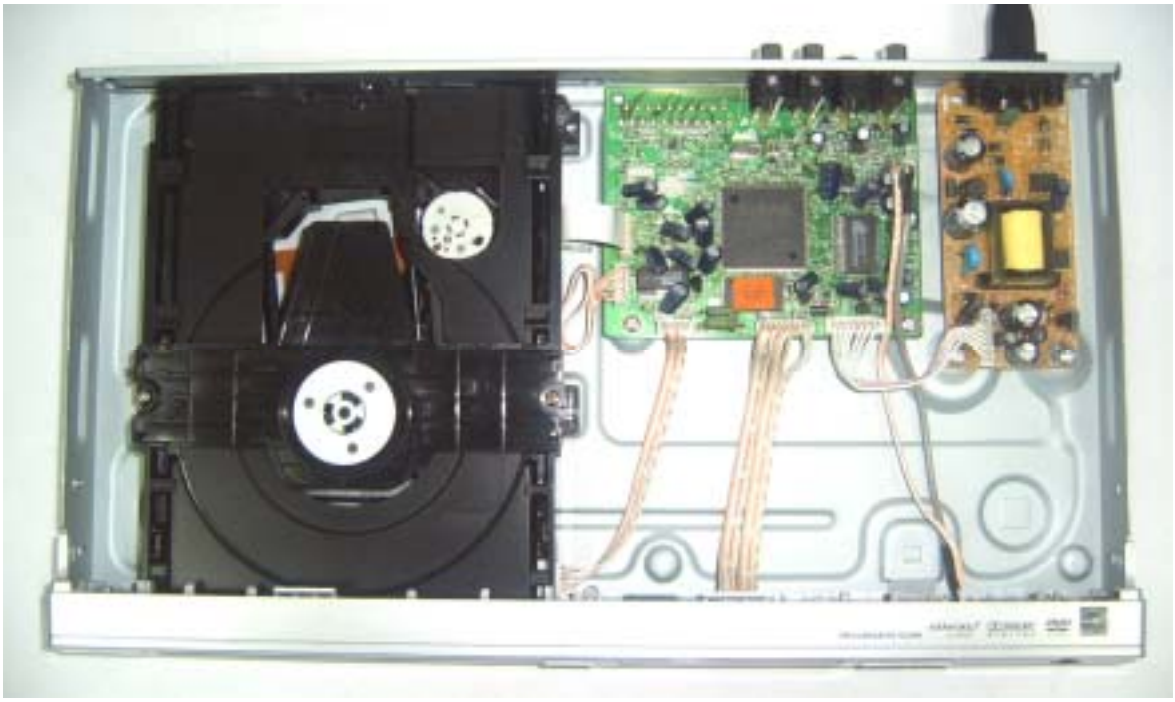


Figure 1

Step2: If it is necessary to dismantle Loader or Front Panel, It should be remove the Front door assembly first. (Figure 2)
Note: Make sure to operate gently otherwise the guider would be damaged.

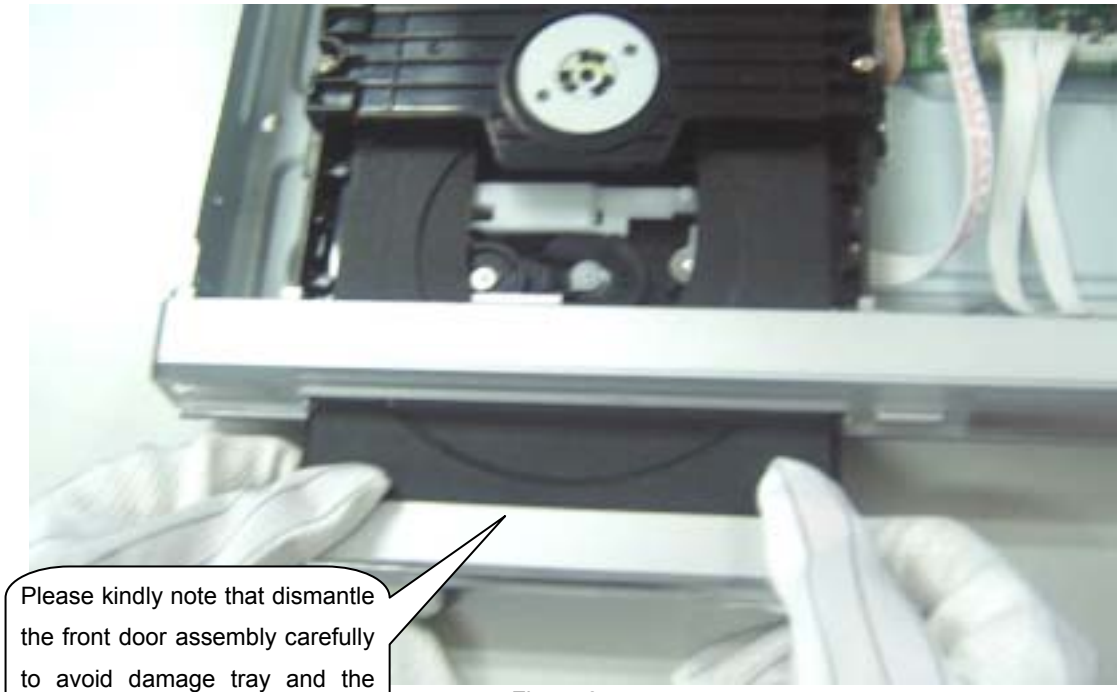


Figure 2

Mechanical and Dismantling Instructions

Dismantling Instruction

Step3: If the tray can't open in normal way, you can make it through the instruction as below (Figure 3).
Note: Make sure to operate gently otherwise the guider would be damaged.

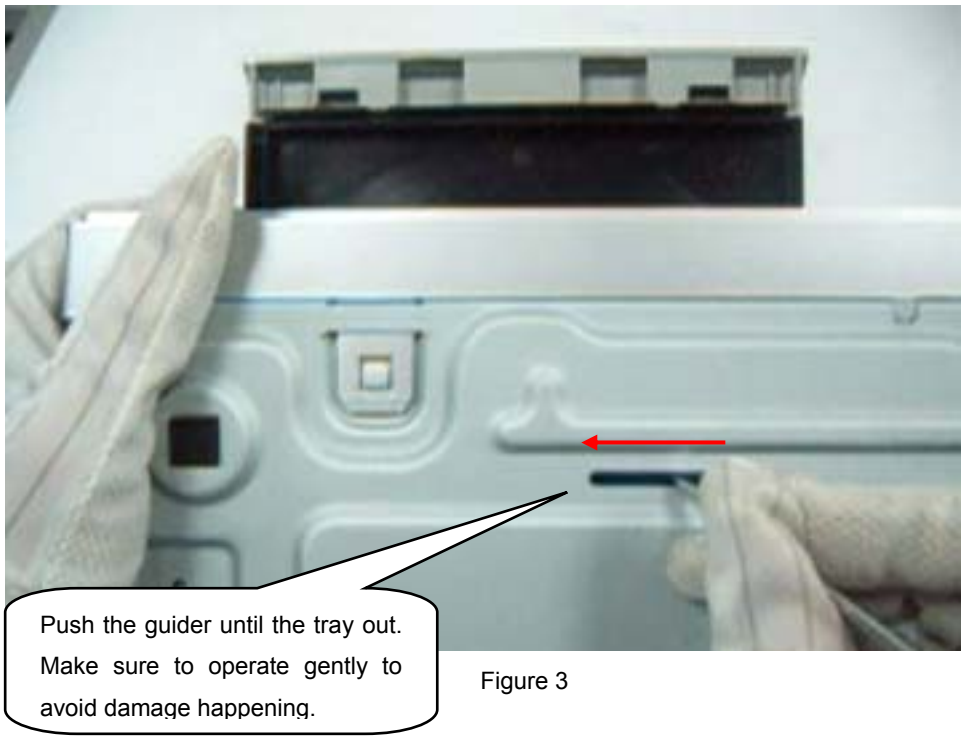


Figure 3

Step4: Dismantling Loader, disconnect the 3 connectors aiming in the below figure, and remove 1 screw at the bottom of Loader. (Figure 4)

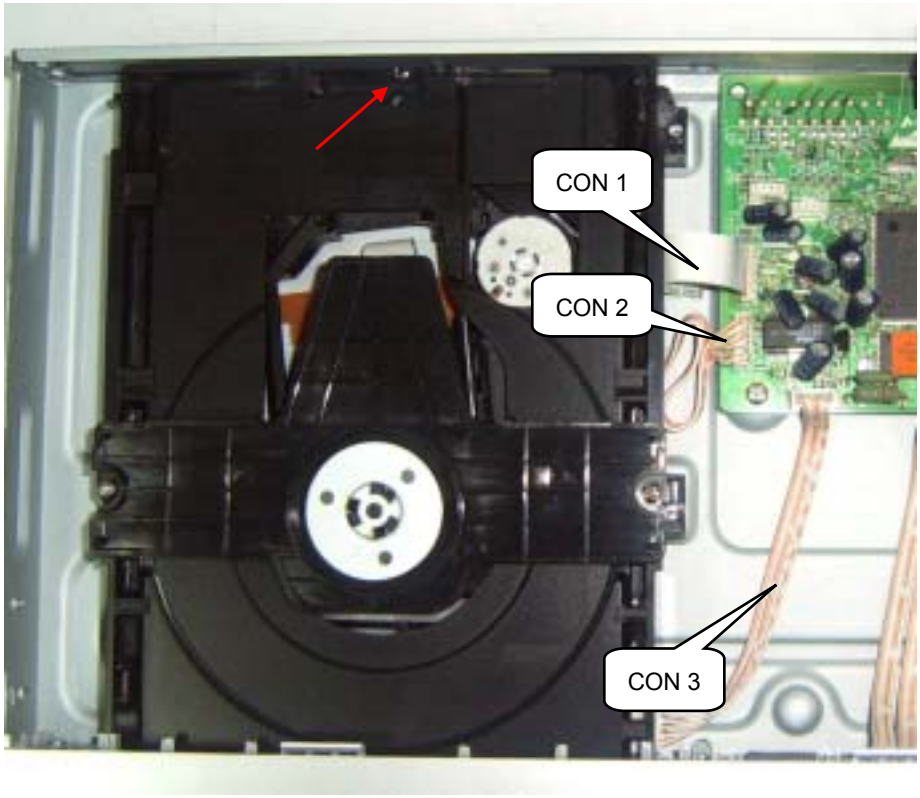


Figure 4

Mechanical and Dismantling Instructions

Dismantling Instruction

Step5: Dismantling Front Panel, disconnect the 1 connector, then release the snaps on the both sides of Front Panel and bottom cabinet , then gently pull the Panel out from the set. (Figure 5 & 6 & 7)

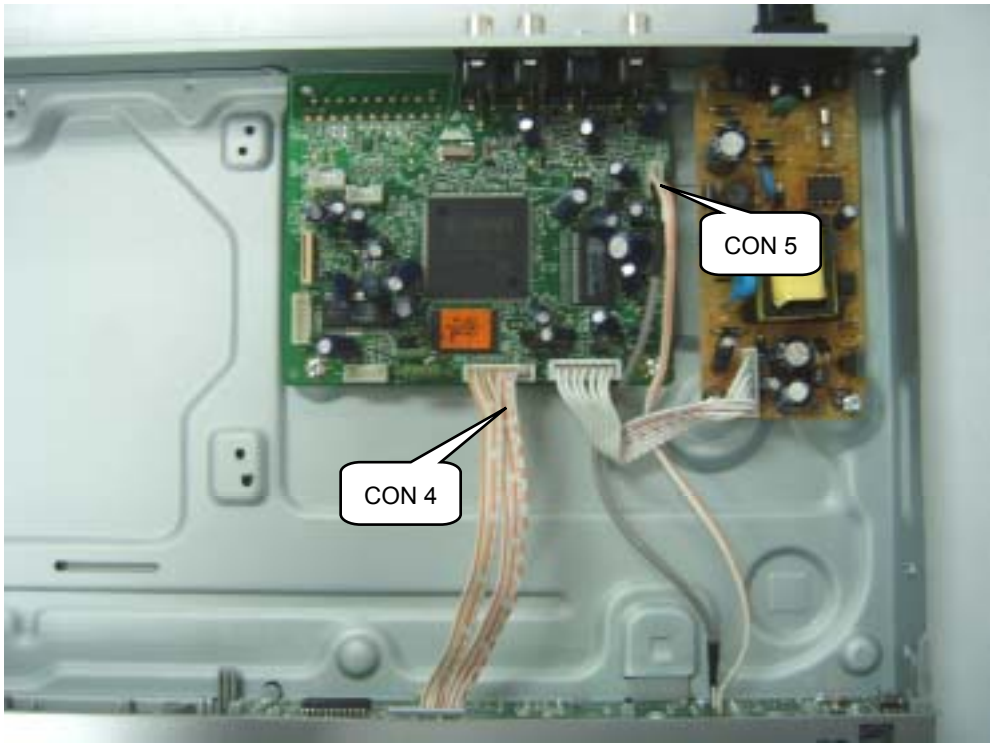


Figure 5

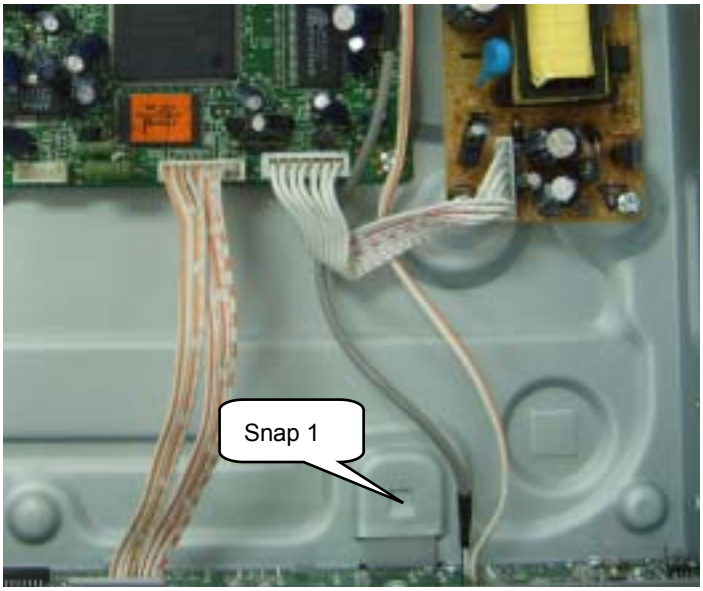


Figure 6

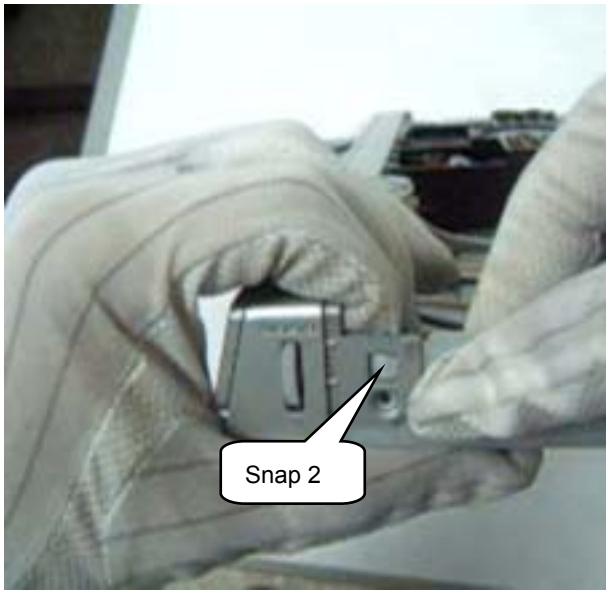


Figure 7

Mechanical and Dismantling Instructions

Dismantling Instruction

Step6: Dismantling Main Board, first disconnect the connector, and then remove 4 screws. (Figure 8)

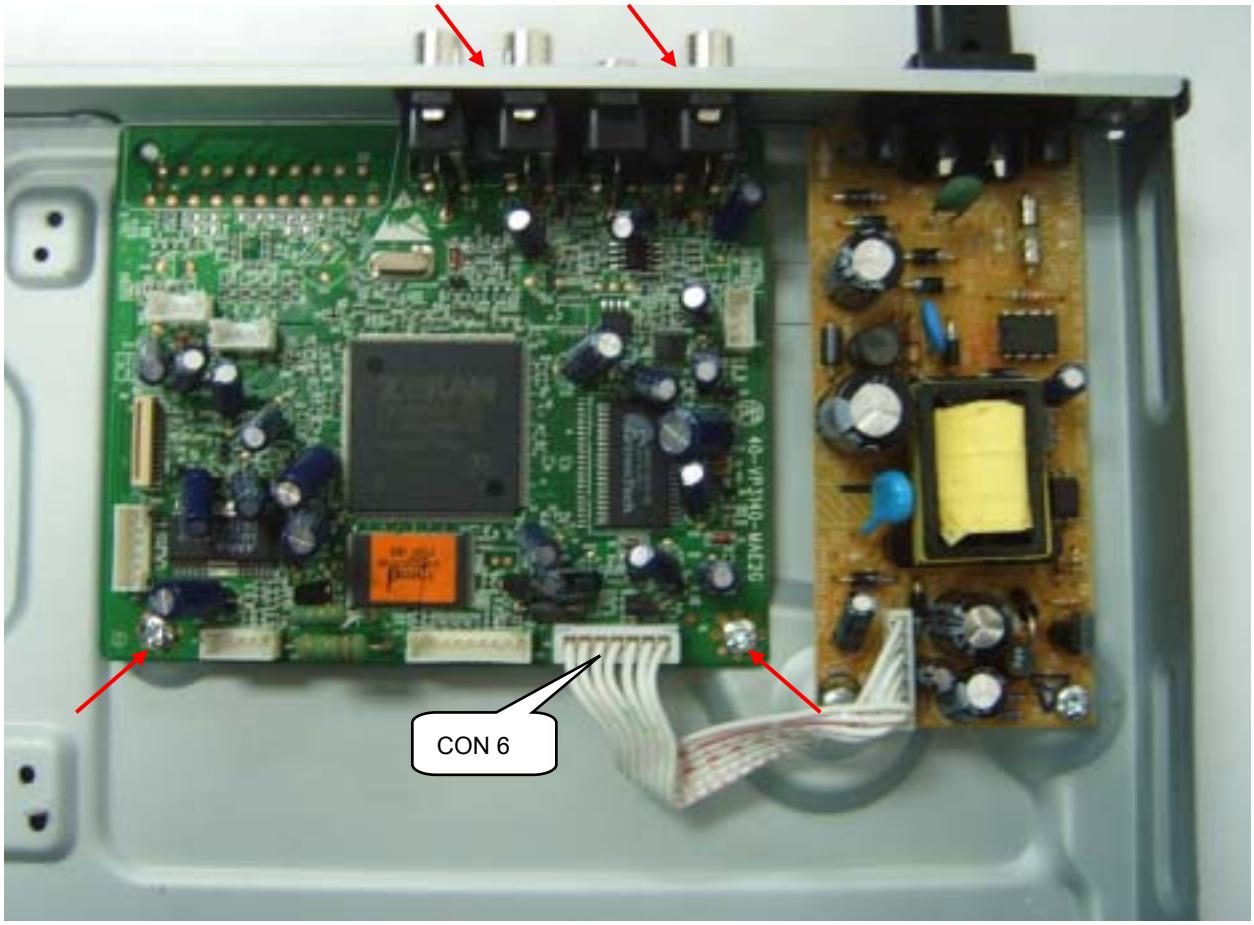


Figure 8

Step7: Remove the 2 screws on Power Board to dismantle the Power Board. (Figure 9)

Figure 9

Software upgrade

Preparation to upgrade software

1) Start the CD Burning software and create a new CD project (Data Disc) with the following setting:
   Label: DVP3XXX (No need the label name)

Note: It is required capital letter for the File System name, and it no need have the File name during start the CD burning software for Zoran project.

2) Burn the data onto a blank CDR

A. Procedure for software upgrade:

1) Power up the set and insert the prepared Upgrade CDR.
2) The set will start reading disc & response with the following display TV screen:

   Loading

   Firmware Upgrade Erase and program.

   Start Cancel

   Select Start to start upgrade.
3) Press <OK> button to confirm, then screen will display :
   Firmware Upgrade Programming, Please Wait...
   Do not Switch the Player Off !
4) The upgraded disc will automatically out when files coping complete, then take out the disc.
5) About 1 minute later, the trace will automatically close when upgrading complete.

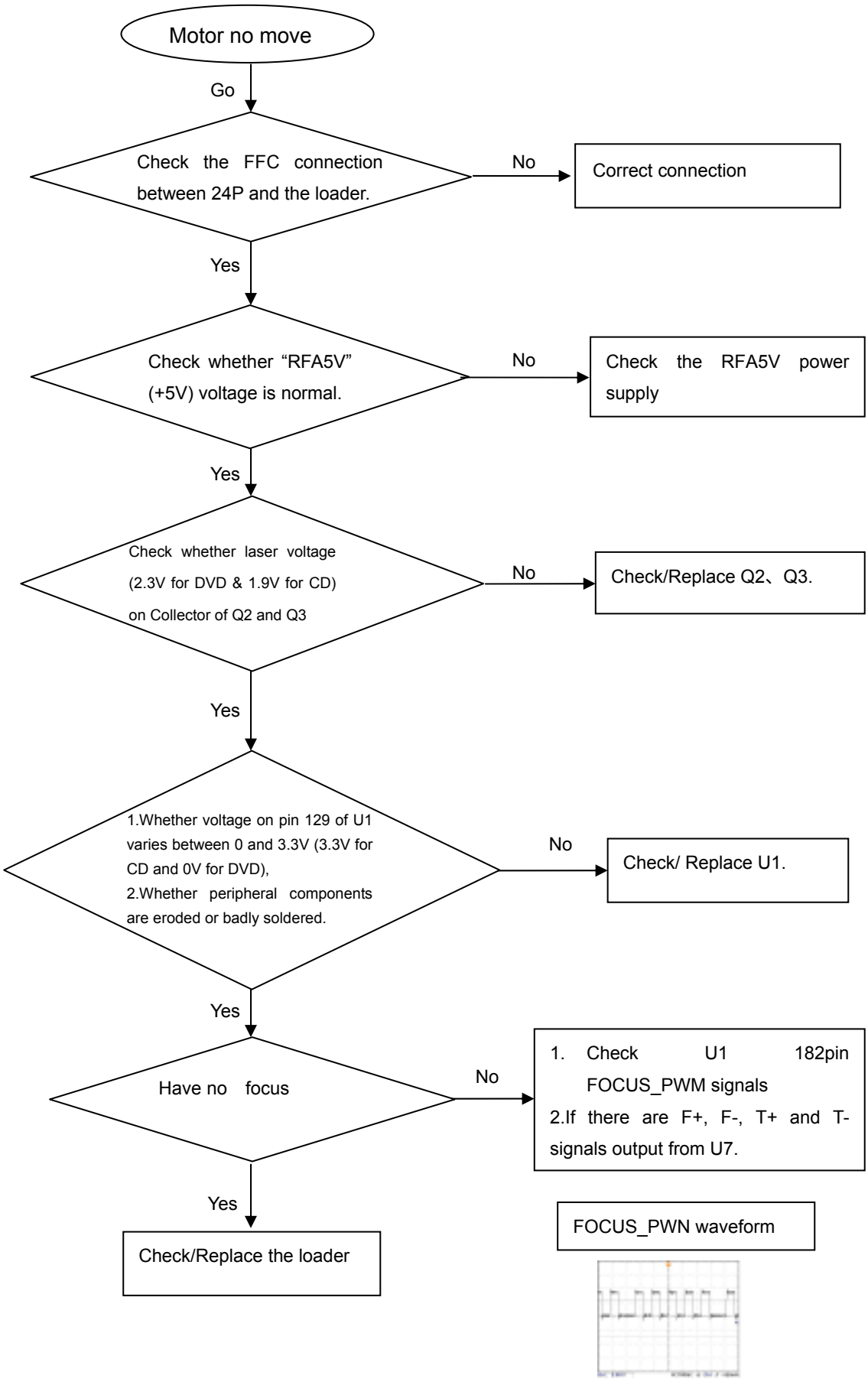
B. Read out the software versions to confirm upgrading

1) Power up the set and open the tray door.
2) Press <9><6><6> button to check the software information.
   The software version and other information are display on the TV screen as follows:
   BE Version: DVP3XXXXX_XX.XX
   FE Version: DCX.XXXXXX.XX.XX
   DSP Version: DSP.XX
   Region Code: X

Caution: The set must not be power off during upgrading, Otherwise the Main board will be damaged entirely.

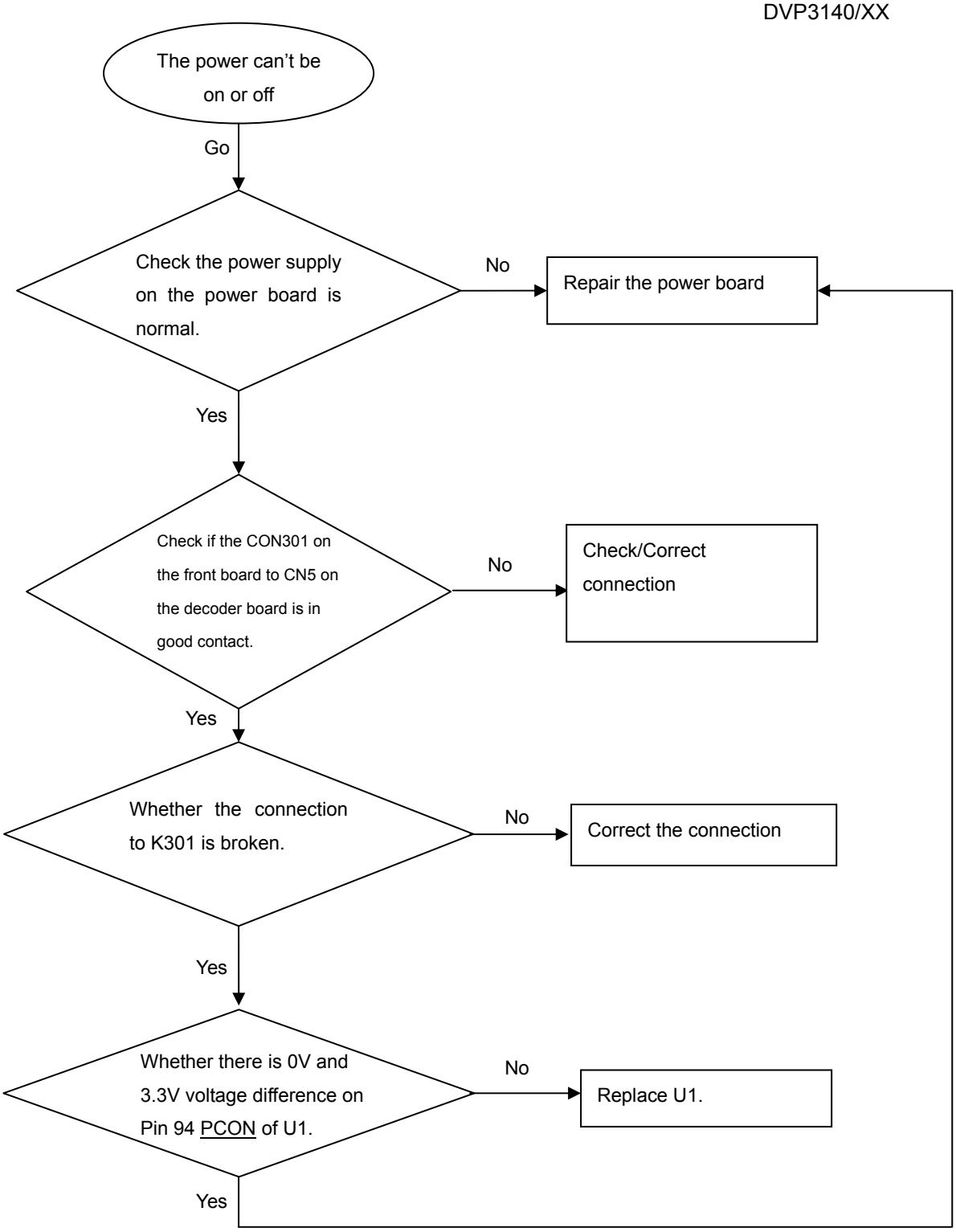
Spindle motor does not move

Remark: Trouble shooting chart for DVP3140/XX



The power can not be on or off

Remark: Trouble shooting chart for DVP3140/XX



All output voltages on the power board is 0V or deviated.

Remark: Trouble shooting chart for DVP3140/XX

All output voltages on the power board is 0V or deviated

Yes

Check whether F1 is blown

Yes → Replace F1

No

Check whether there is 300V on C1 and C2.

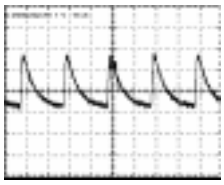
No → Replace C1&C2 if D1, D2, D3, D4 are normal.

Yes

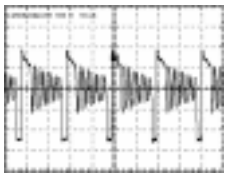
Check whether 100KHz oscillating signal on Pin6 of U1

No → Check/ replace U1.

U1(PIN 3 - RC waveform)



U1(PIN 8 - Drain waveform)



Yes

Check if +5V, , +12V and -12V are short.

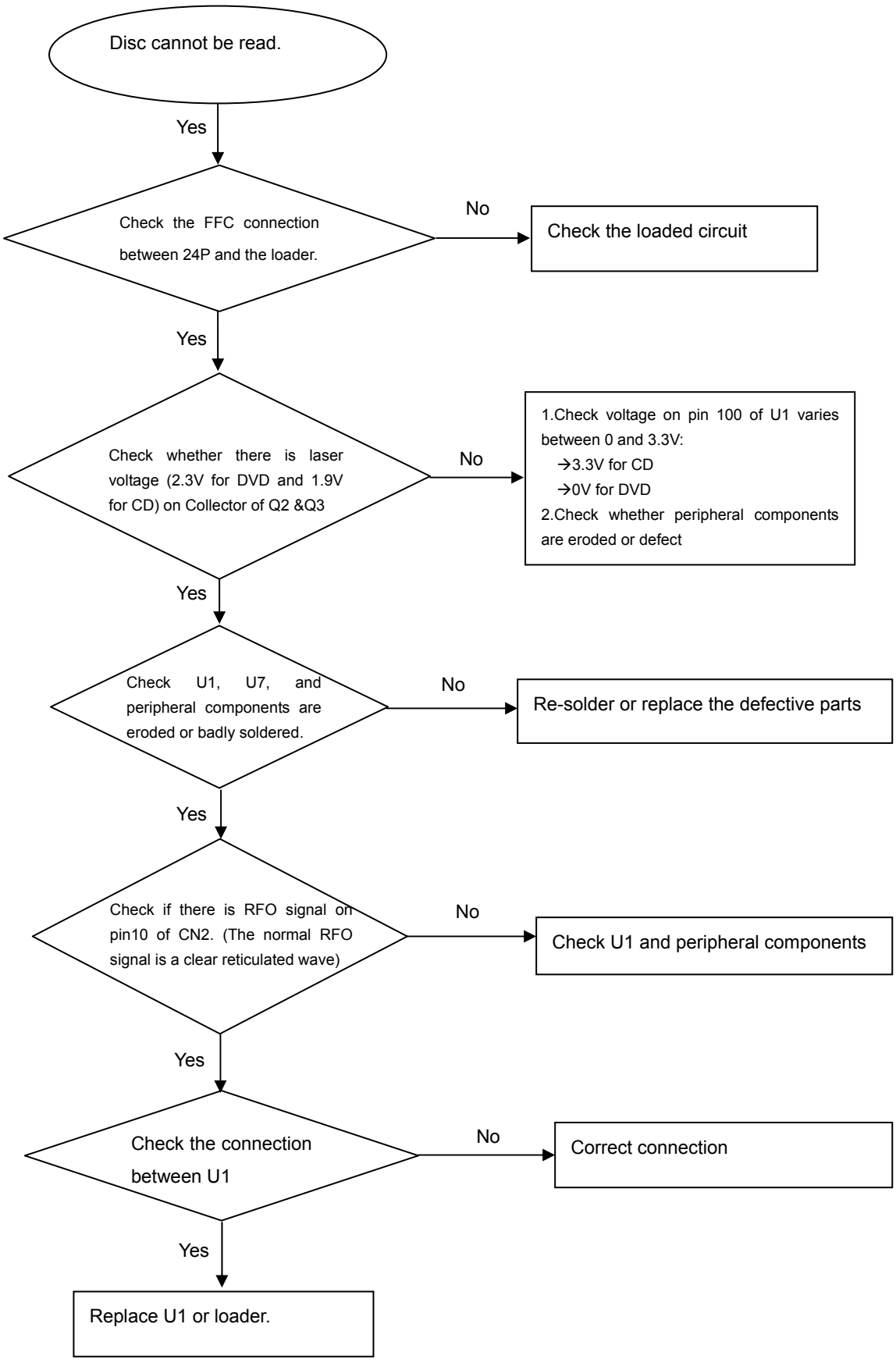
No → Check whether U1 are eroded.

Yes

Check whether the components in the short-circuit voltage are defected or eroded.

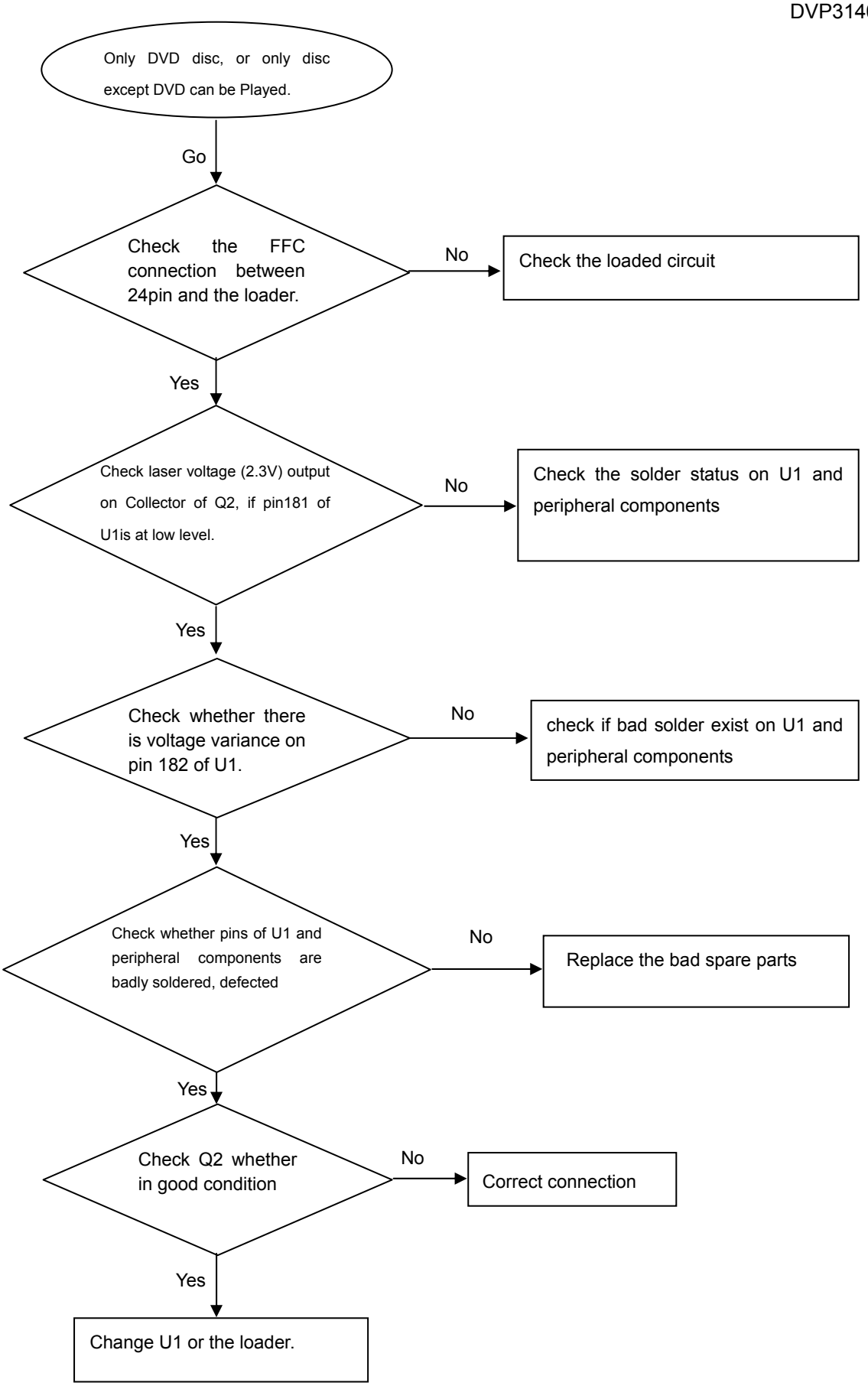
Disc cannot be read.

Remark: Trouble shooting chart for DVP3140/XX



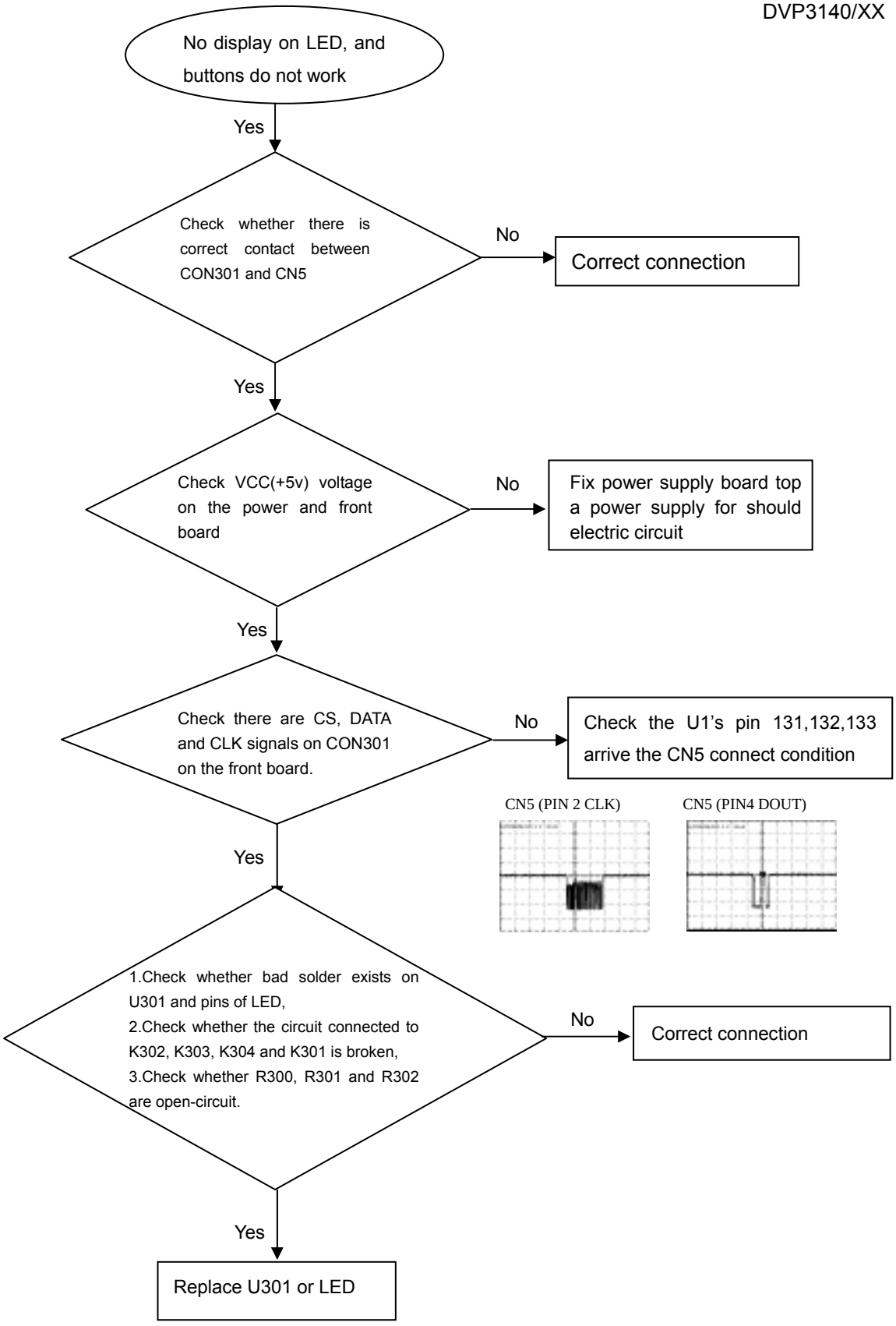
Only DVD disc or only disc except DVD can be played

Remark: Trouble shooting chart for DVP3140/XX



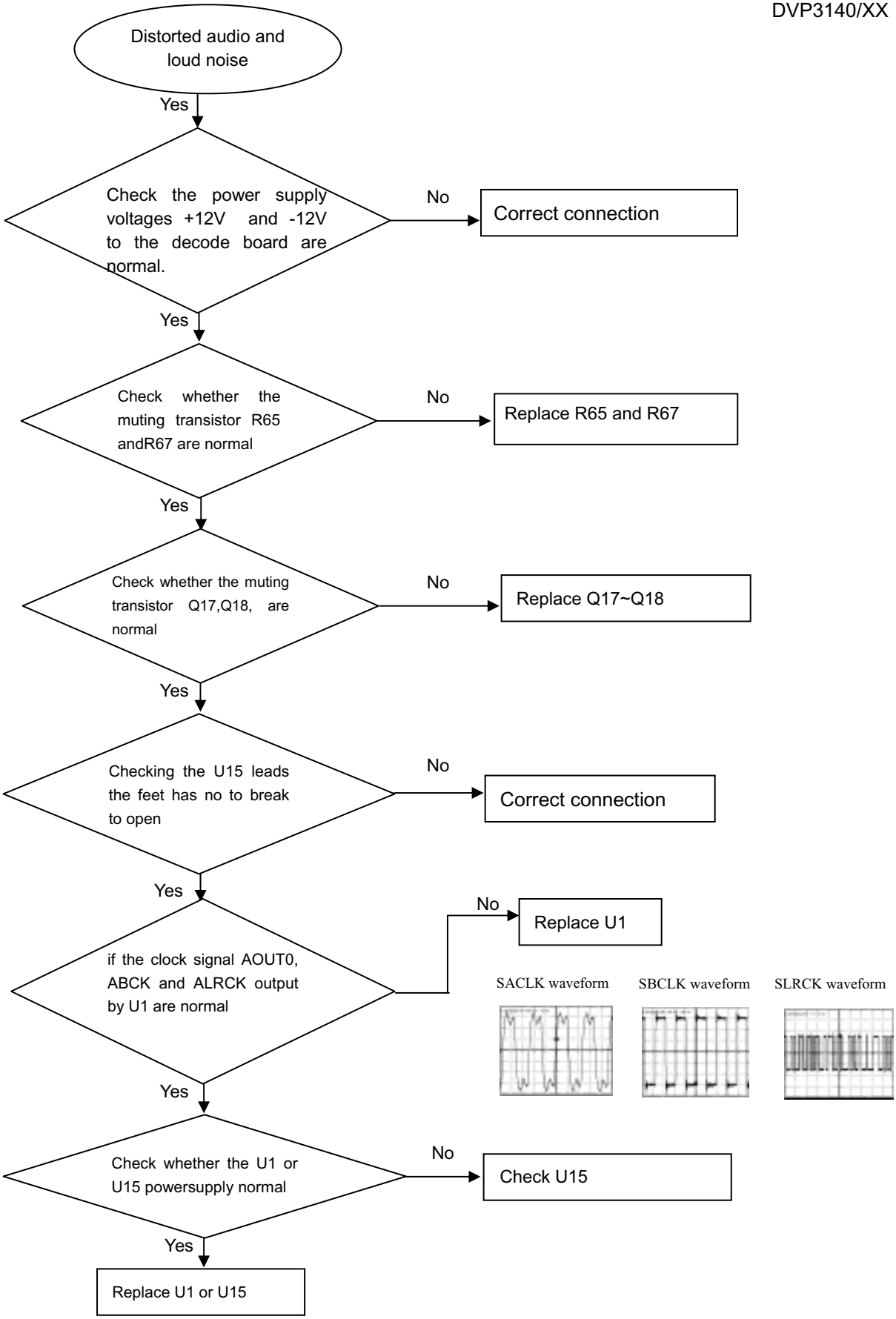
No display on LED, and buttons do not work

Remark: Trouble shooting chart for DVP3140/XX



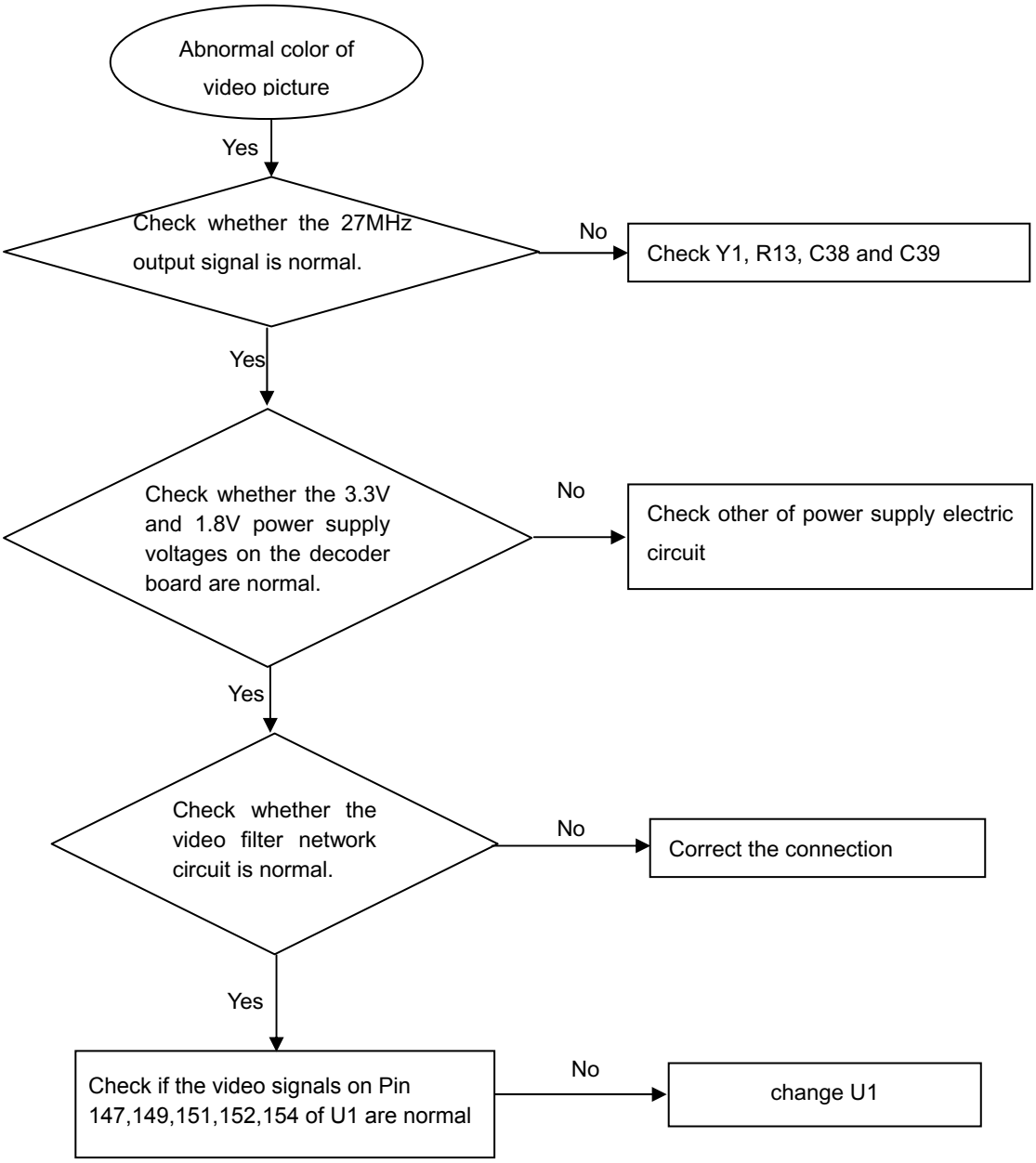
Distorted audio and loud noise

Remark: Trouble shooting chart for DVP3140/XX



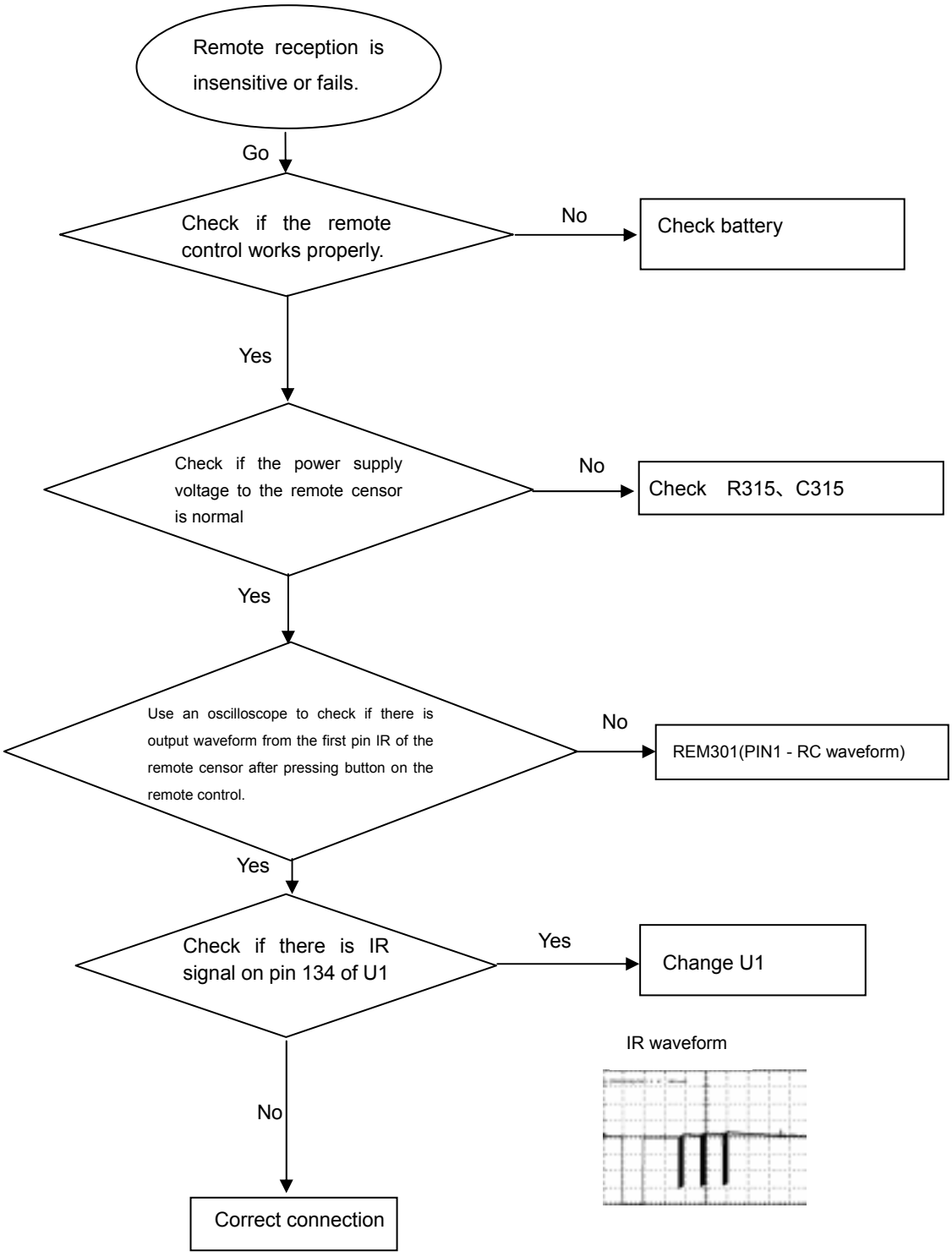
Abnormal color of video picture

Remark: Trouble shooting chart for DVP3140/XX



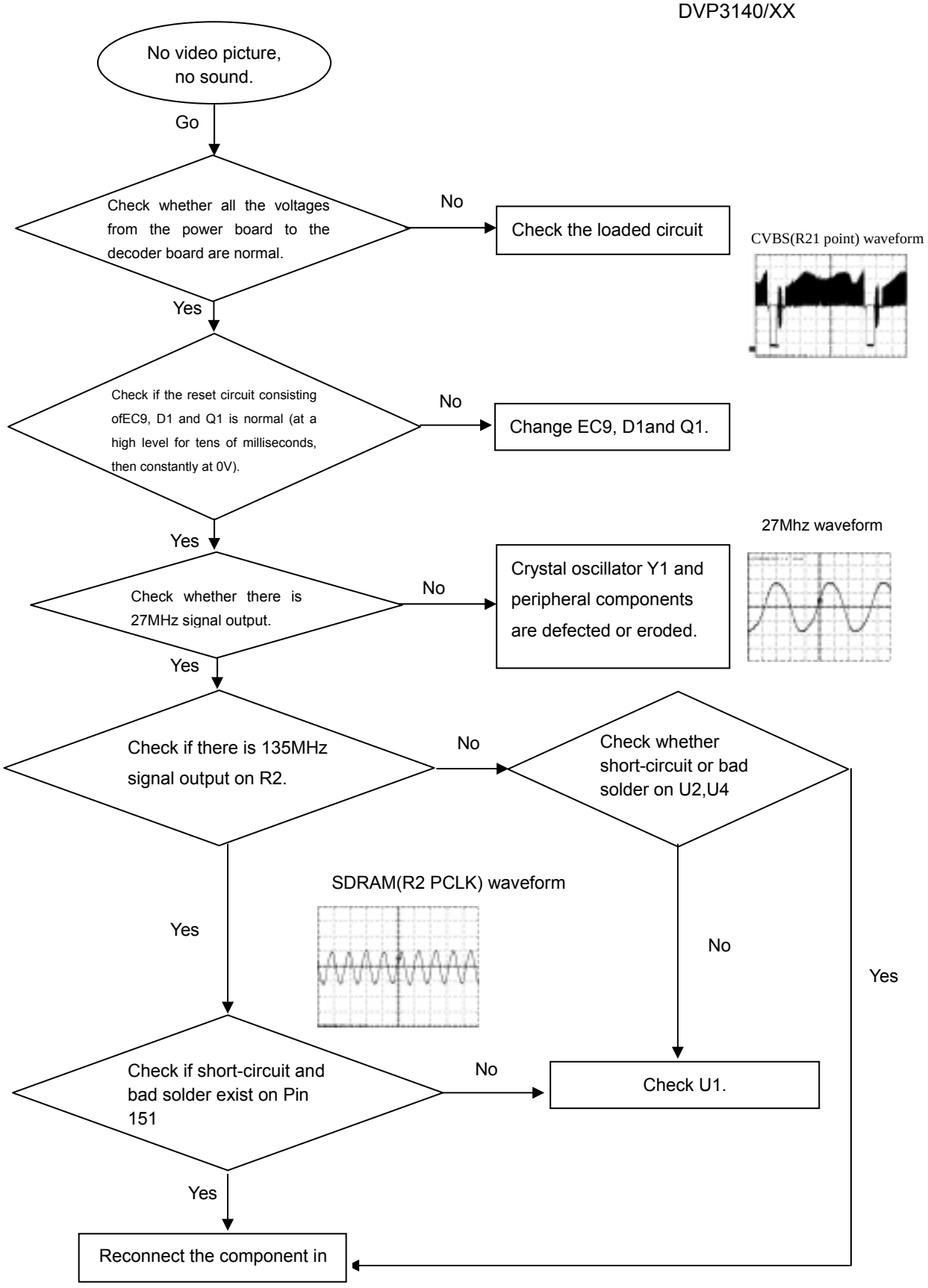
Remote reception is insensitive or fails.

Remark: Trouble shooting chart for DVP3140/XX



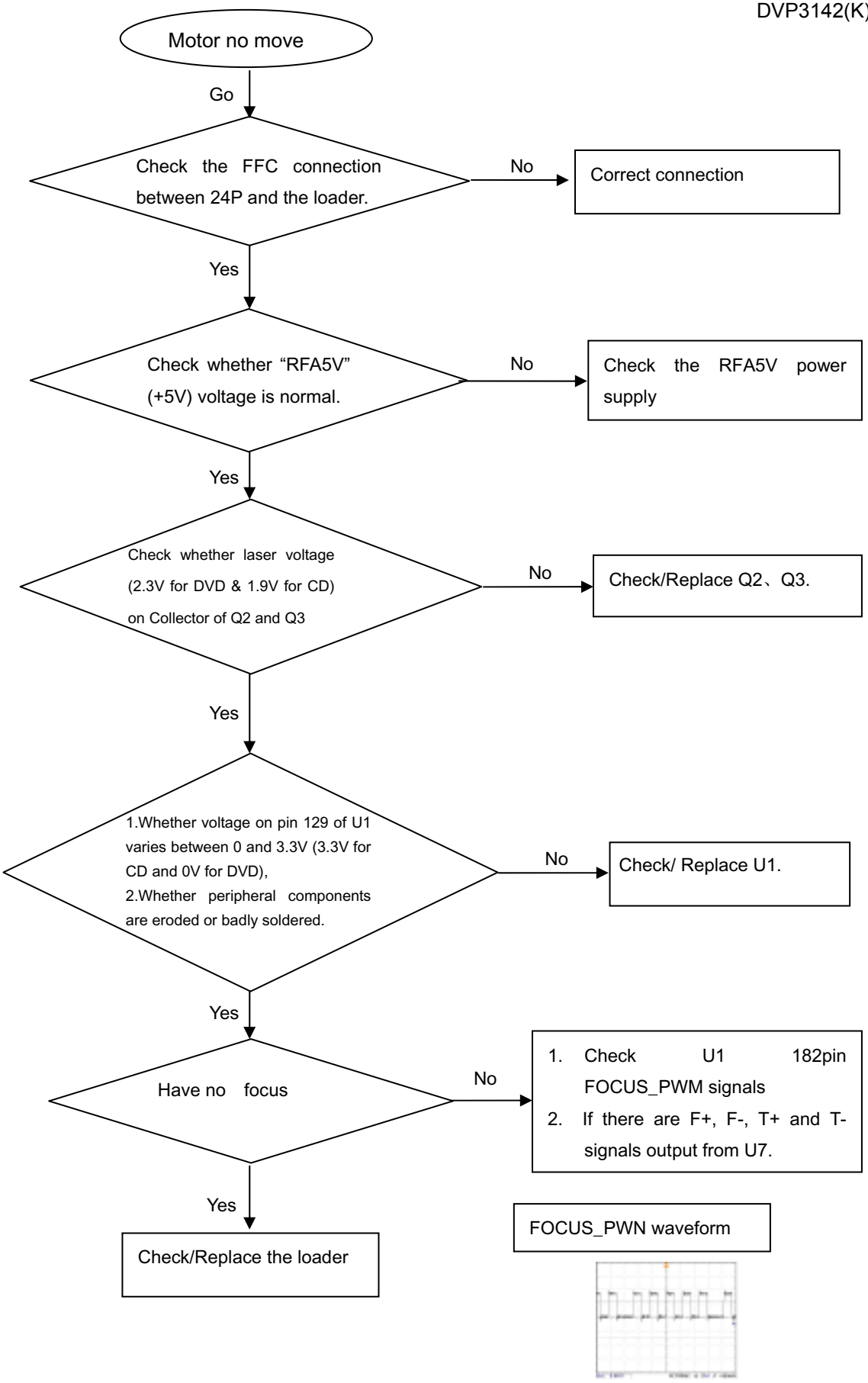
No video picture, no sound.

Remark: Trouble shooting chart for DVP3140/XX



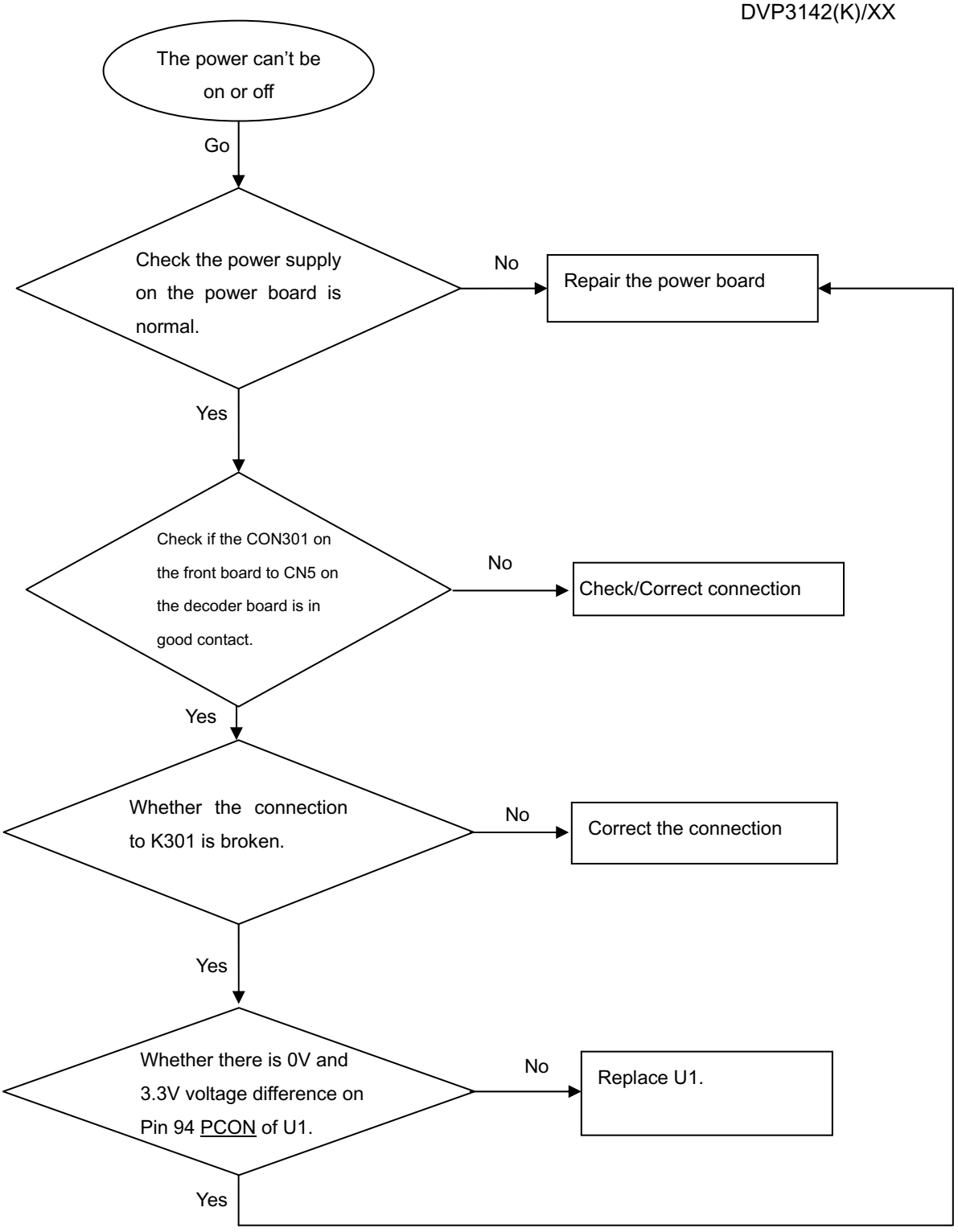
Spindle motor does not move

Remark: Trouble shooting chart for DVP3142(K)/XX



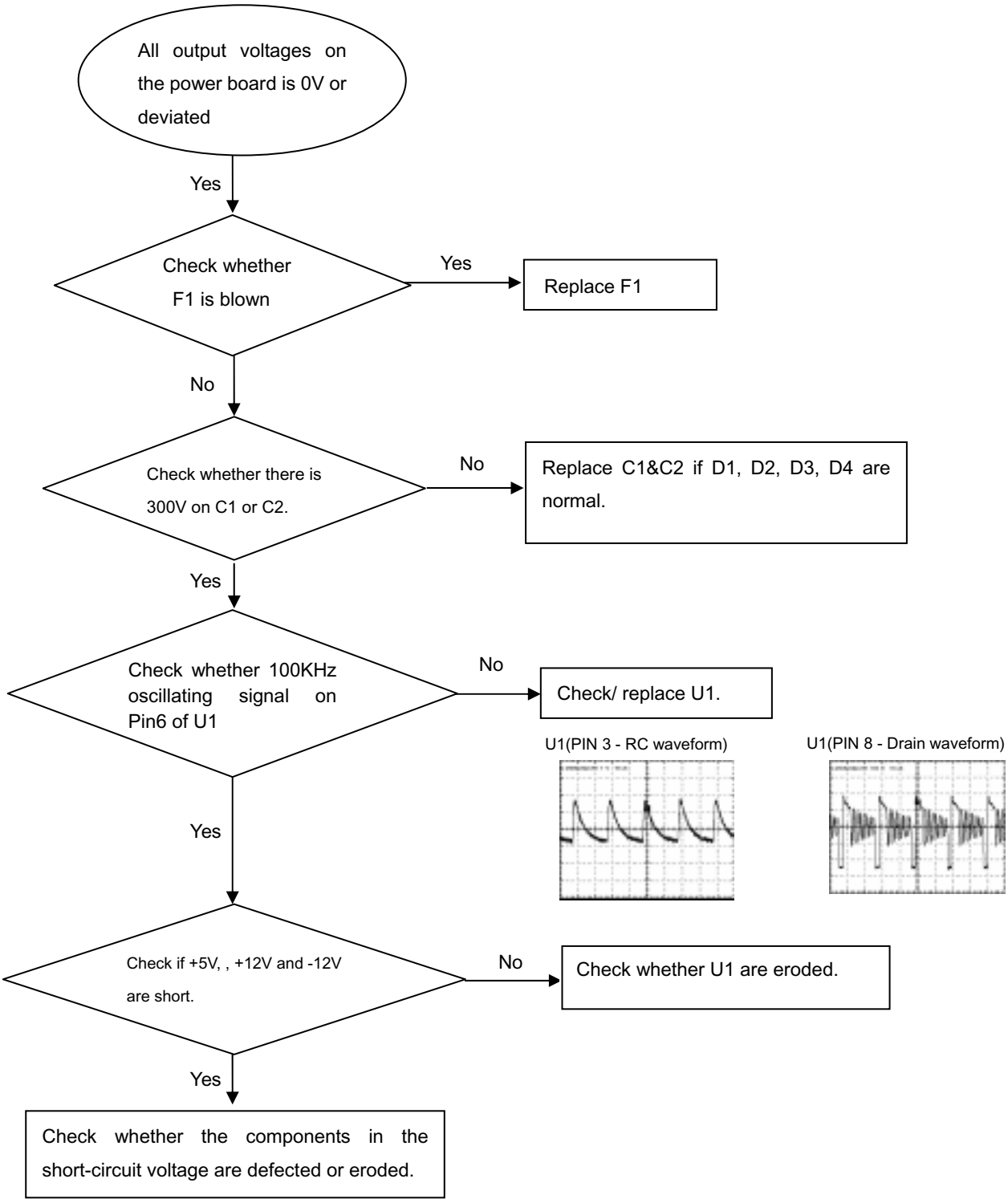
The power can not be on or off

Remark: Trouble shooting chart for DVP3142(K)/XX



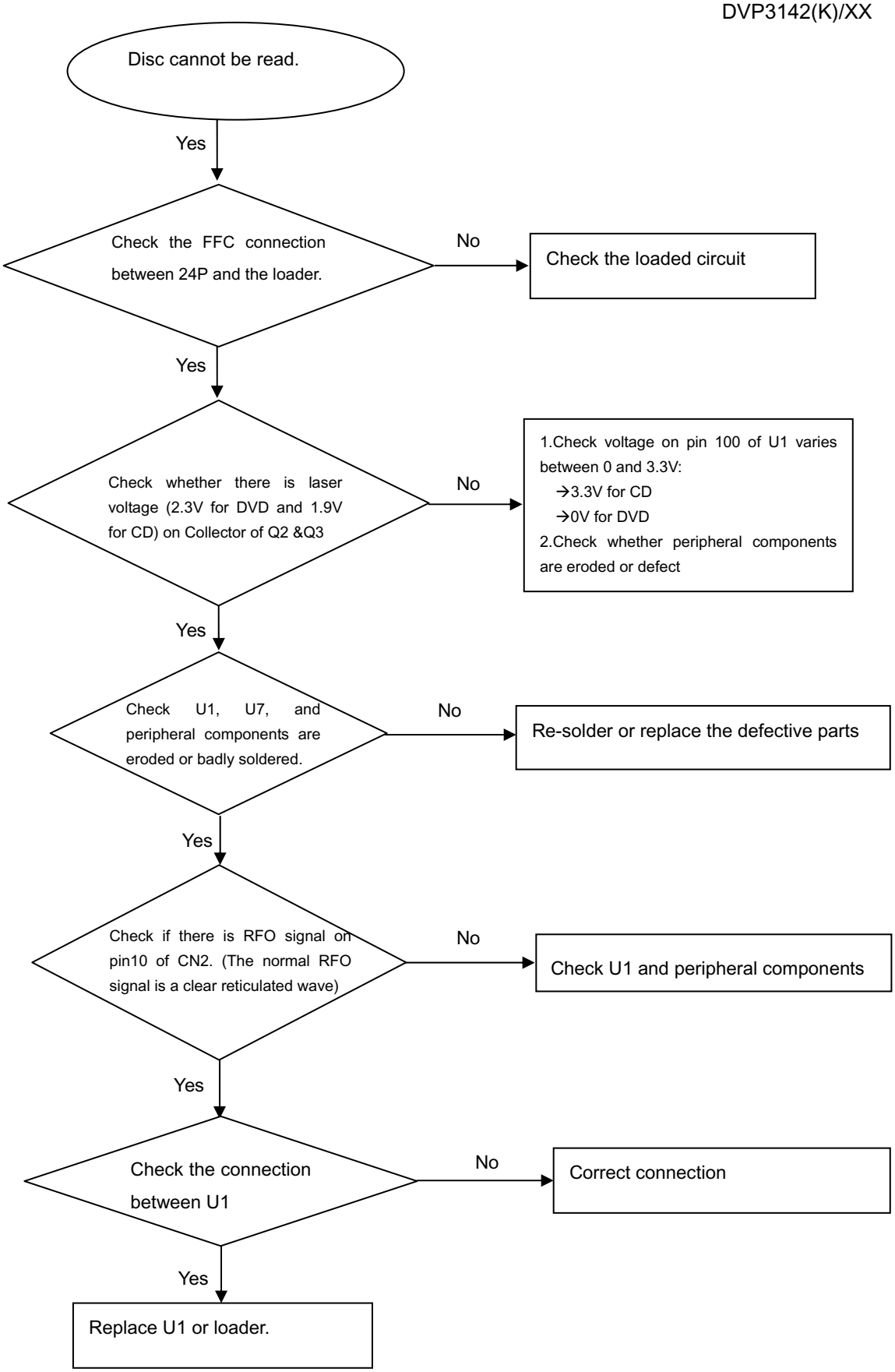
All output voltages on the power board is 0V or deviated.

Remark: Trouble shooting chart for DVP3142(K)/XX



Disc cannot be read.

Remark: Trouble shooting chart for DVP3142(K)/XX



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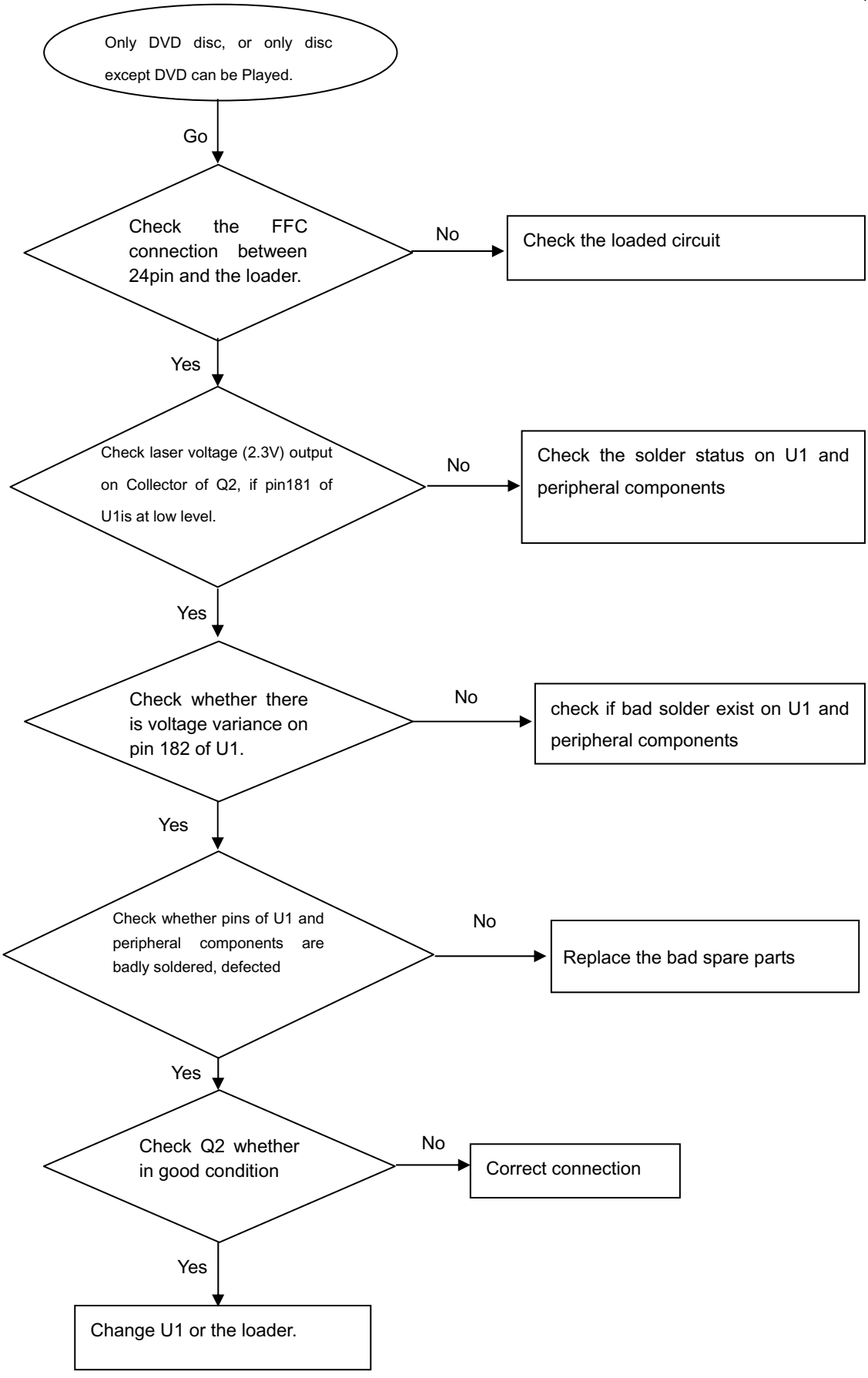
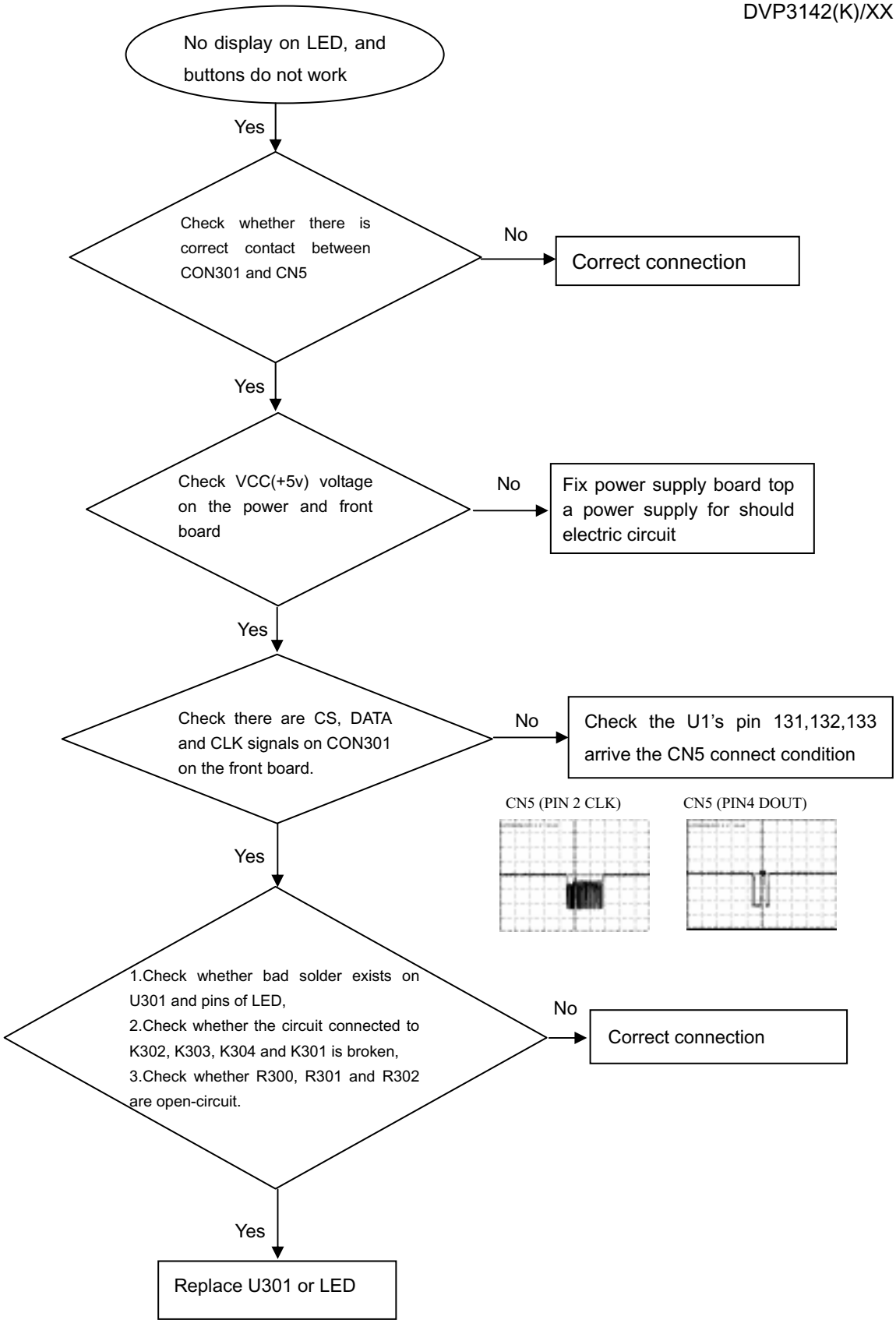


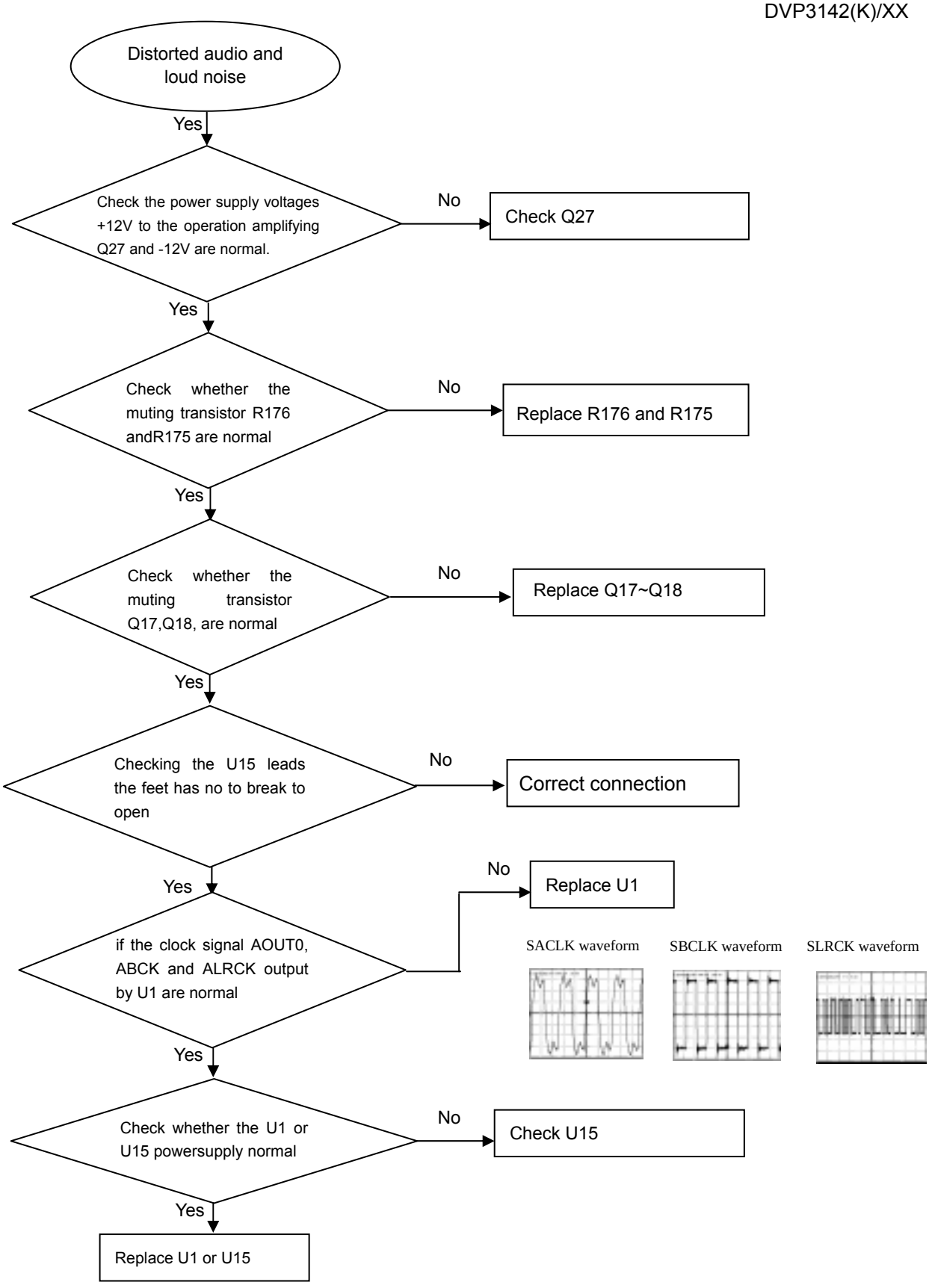
No display on LED, and buttons do not work

Remark: Trouble shooting chart for DVP3142(K)/XX



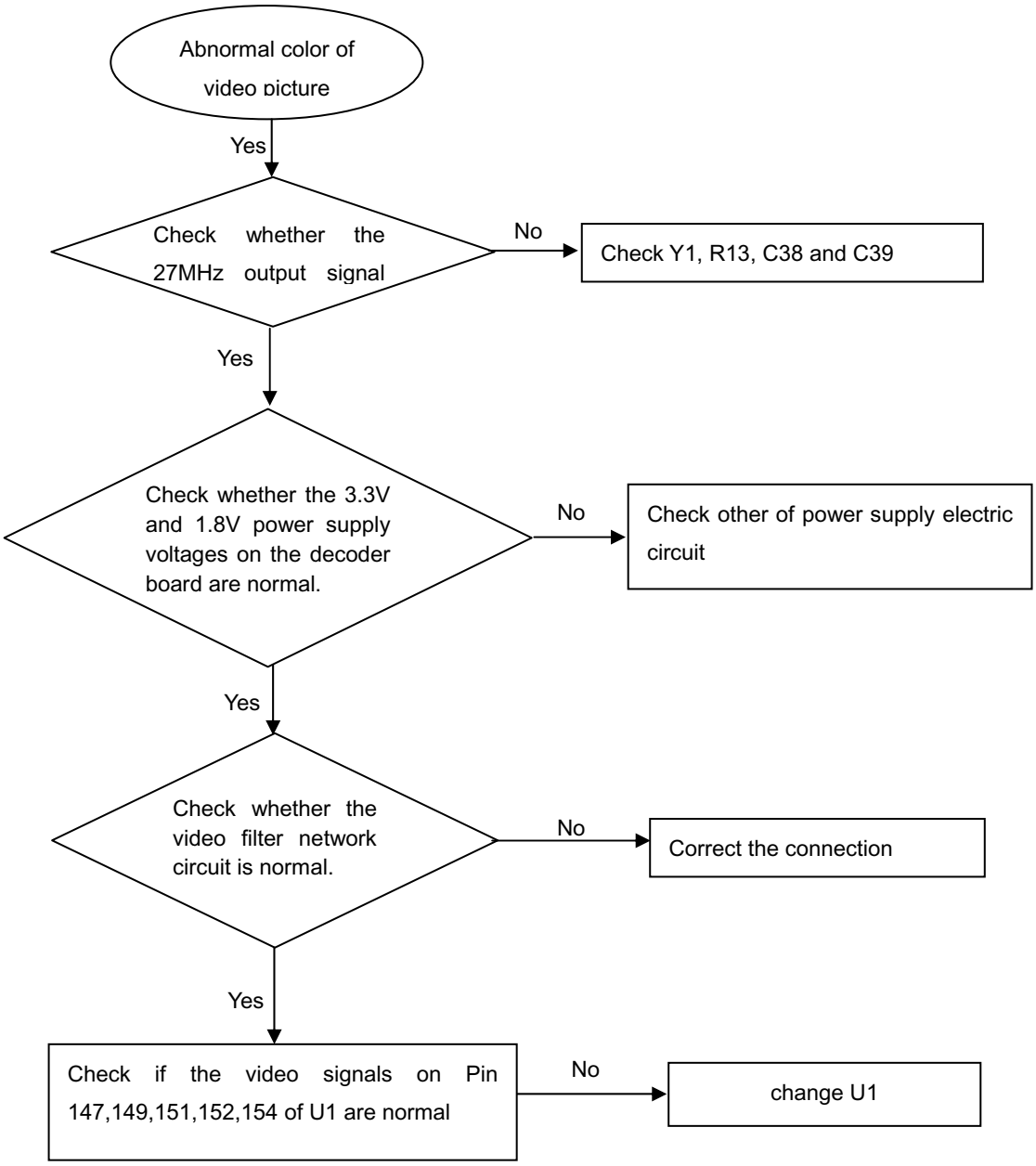
Distorted audio and loud noise

Remark: Trouble shooting chart for DVP3142(K)/XX



Abnormal color of video picture

Remark: Trouble shooting chart for DVP3142(K)/XX



Remote reception is insensitive or fails.

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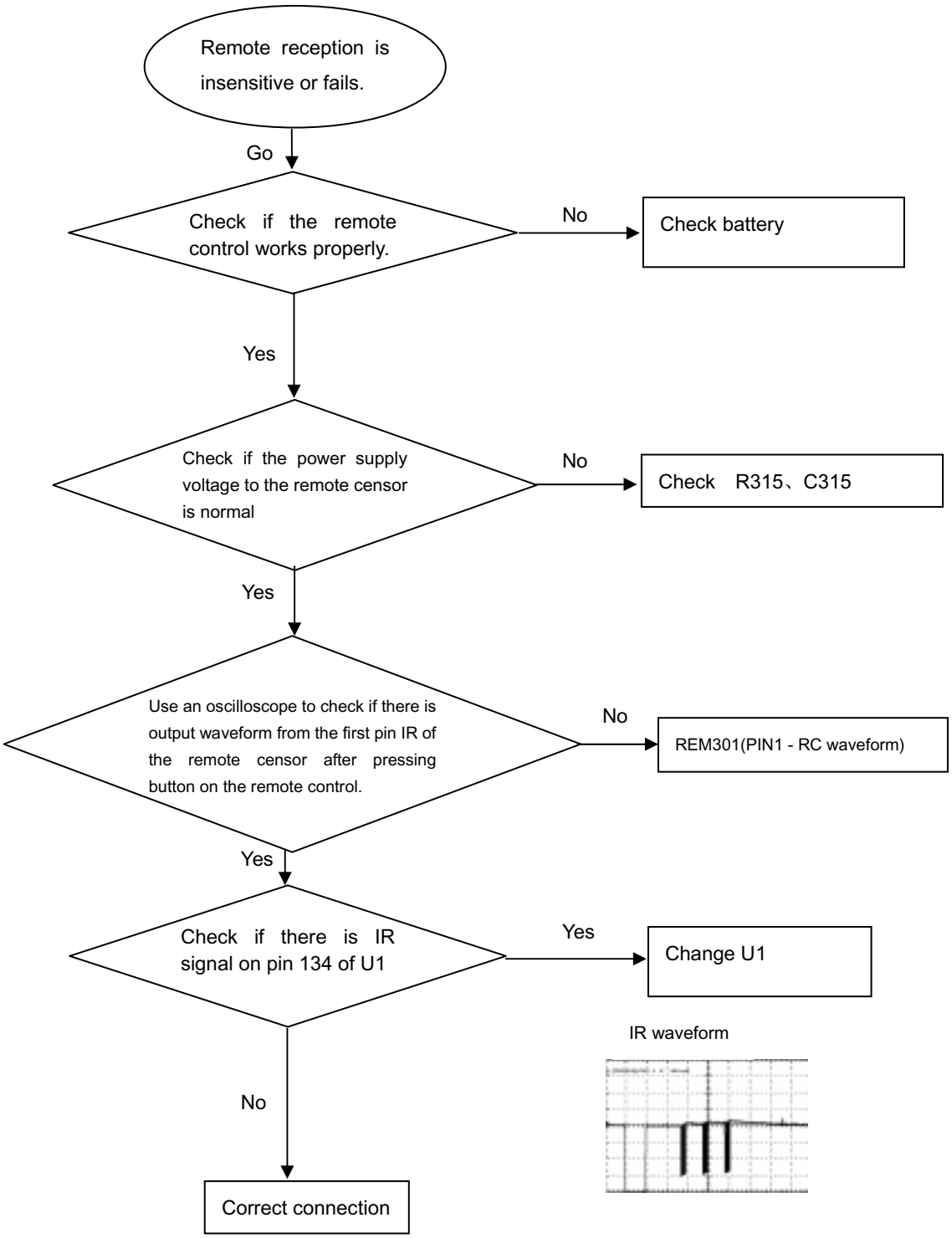
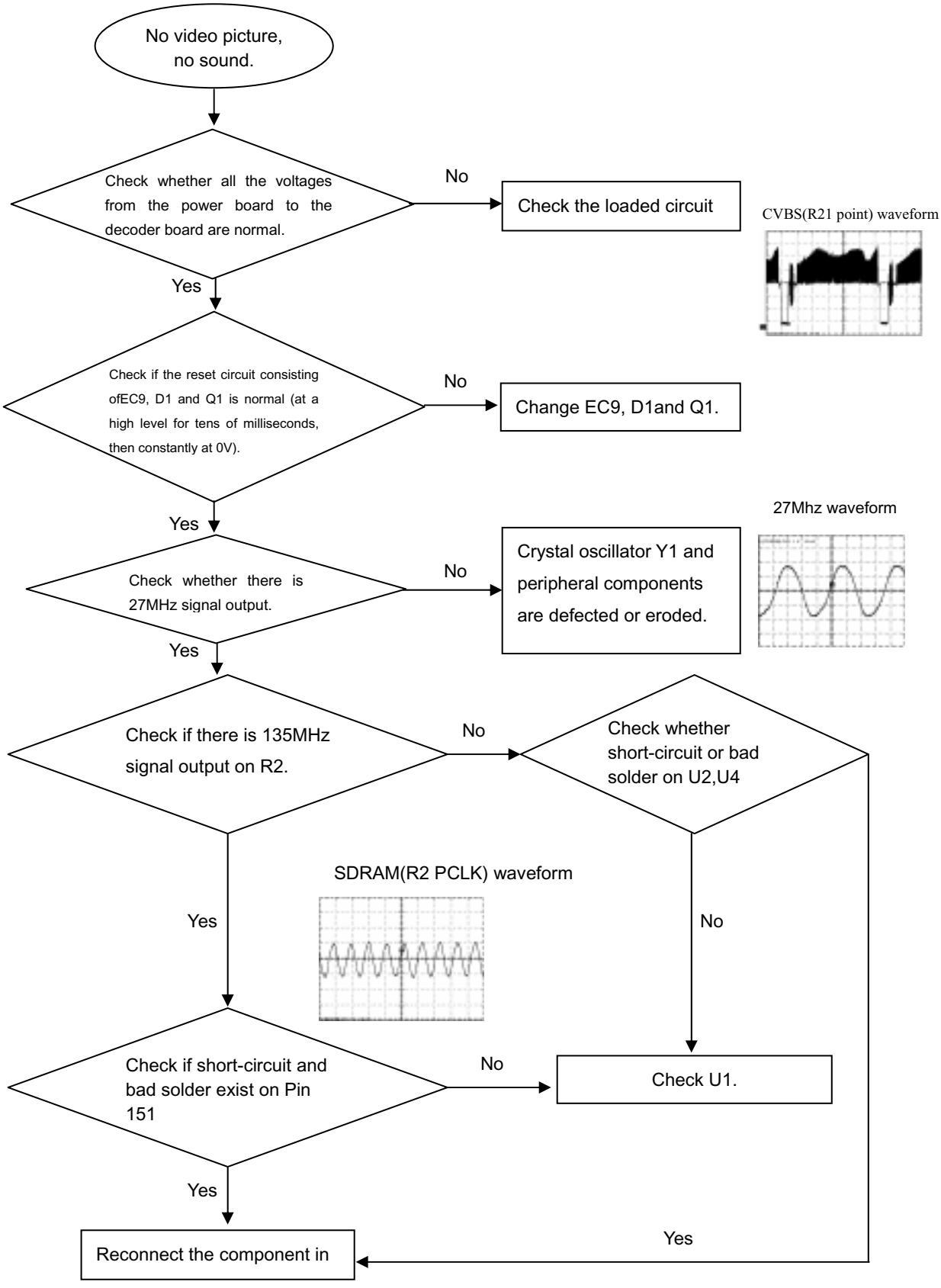


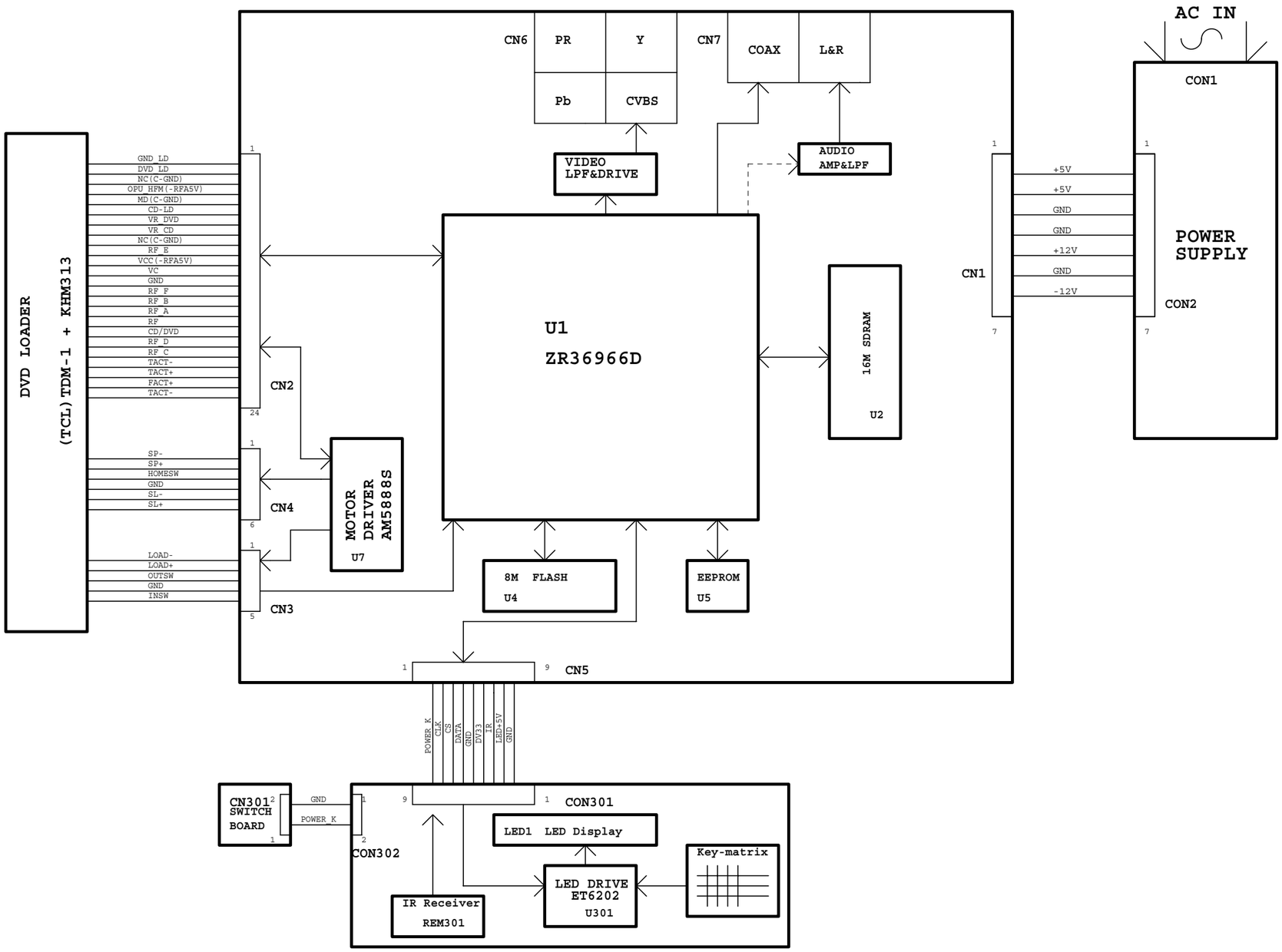
No video picture, no sound.

Remark: Trouble shooting chart for DVP3142(K)/XX



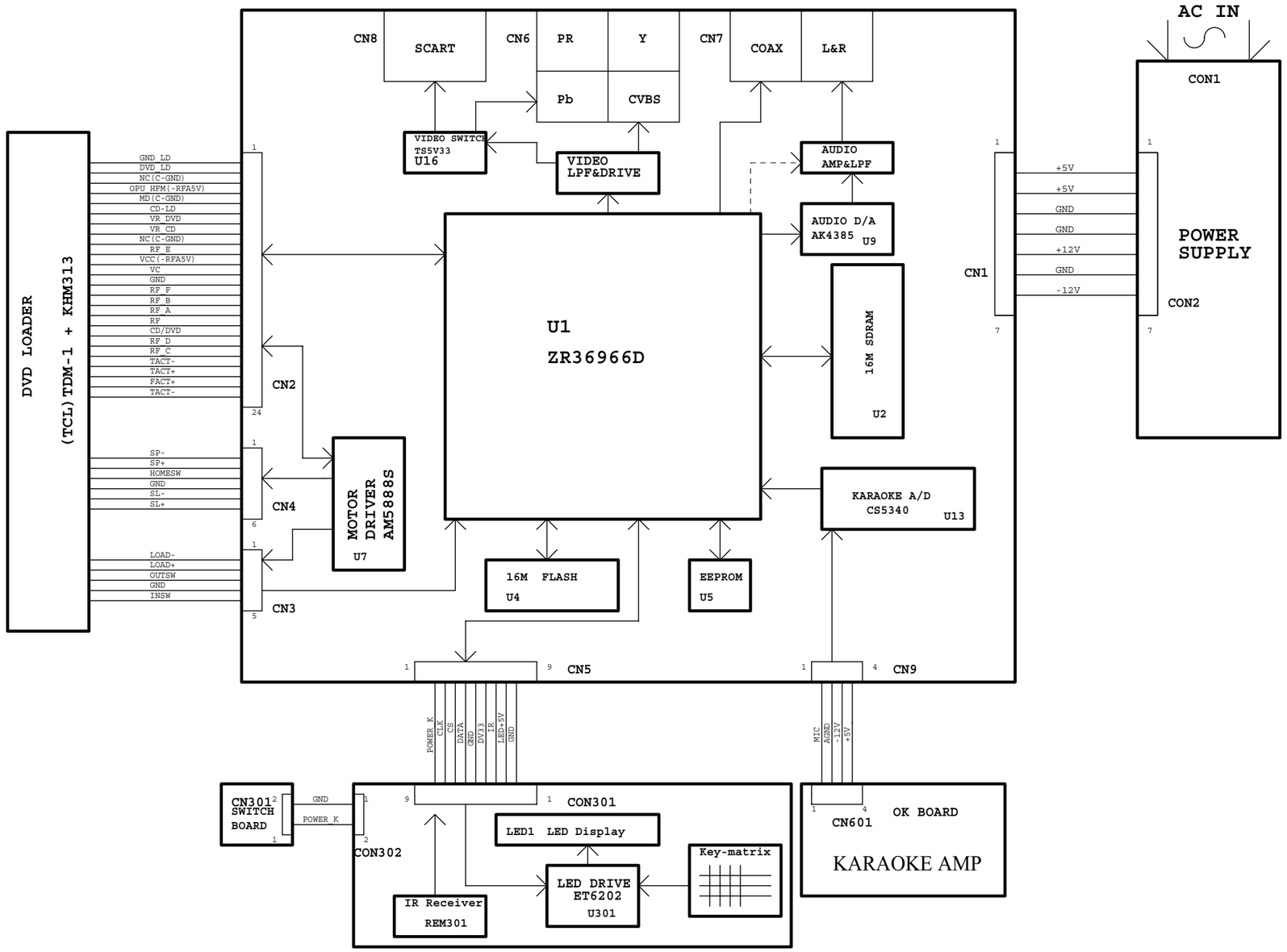
5-1

DVP3140/XX WIRING DIAGRAM



5-2

DVP3142(K)/XX WIRING DIAGRAM



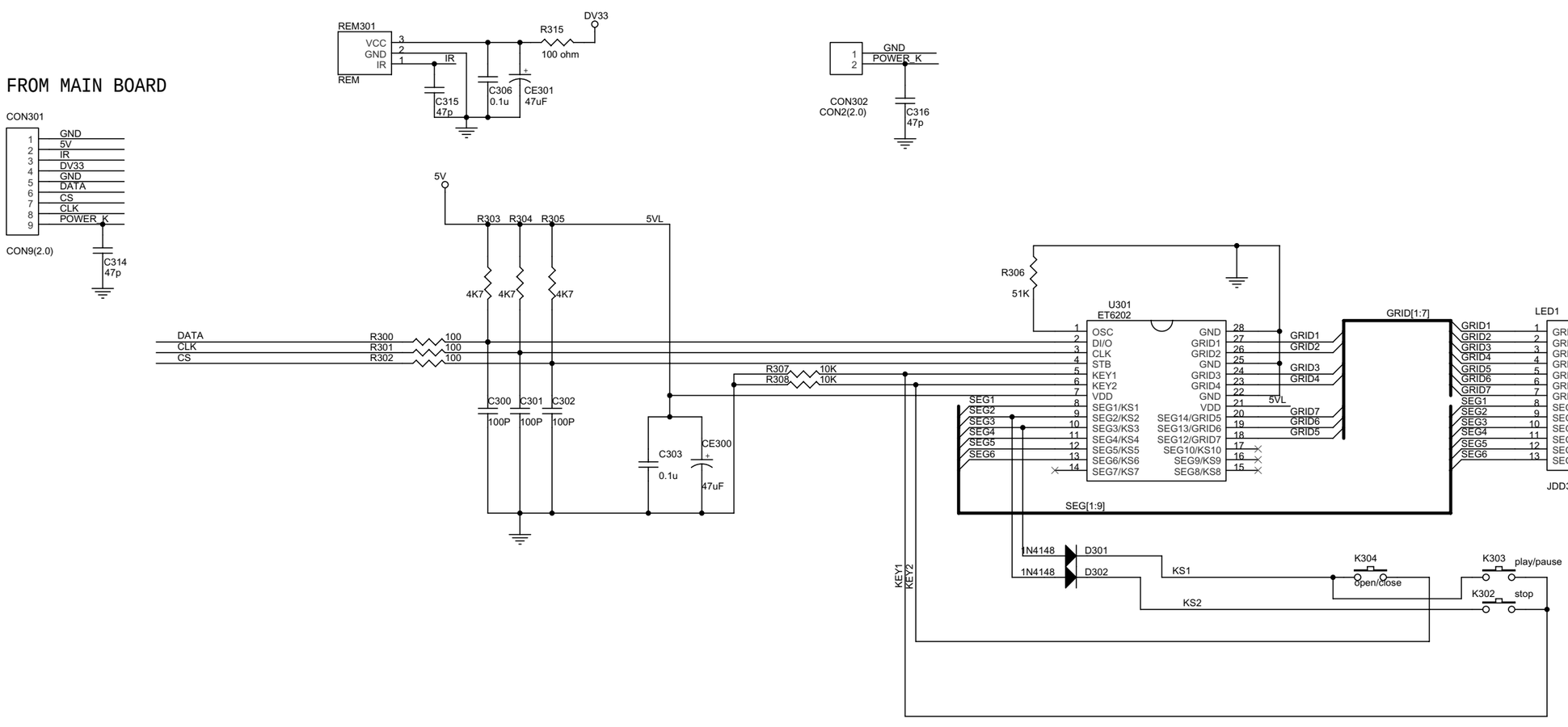
Remark:DVP3142 have no Karaoke.

Only version DVP3142/12 EU hold the SCART output and external DAC AK4385 output.

6-1

Front Board Electric Diagram for DVP3140/XX, DVP3142(K)/XX

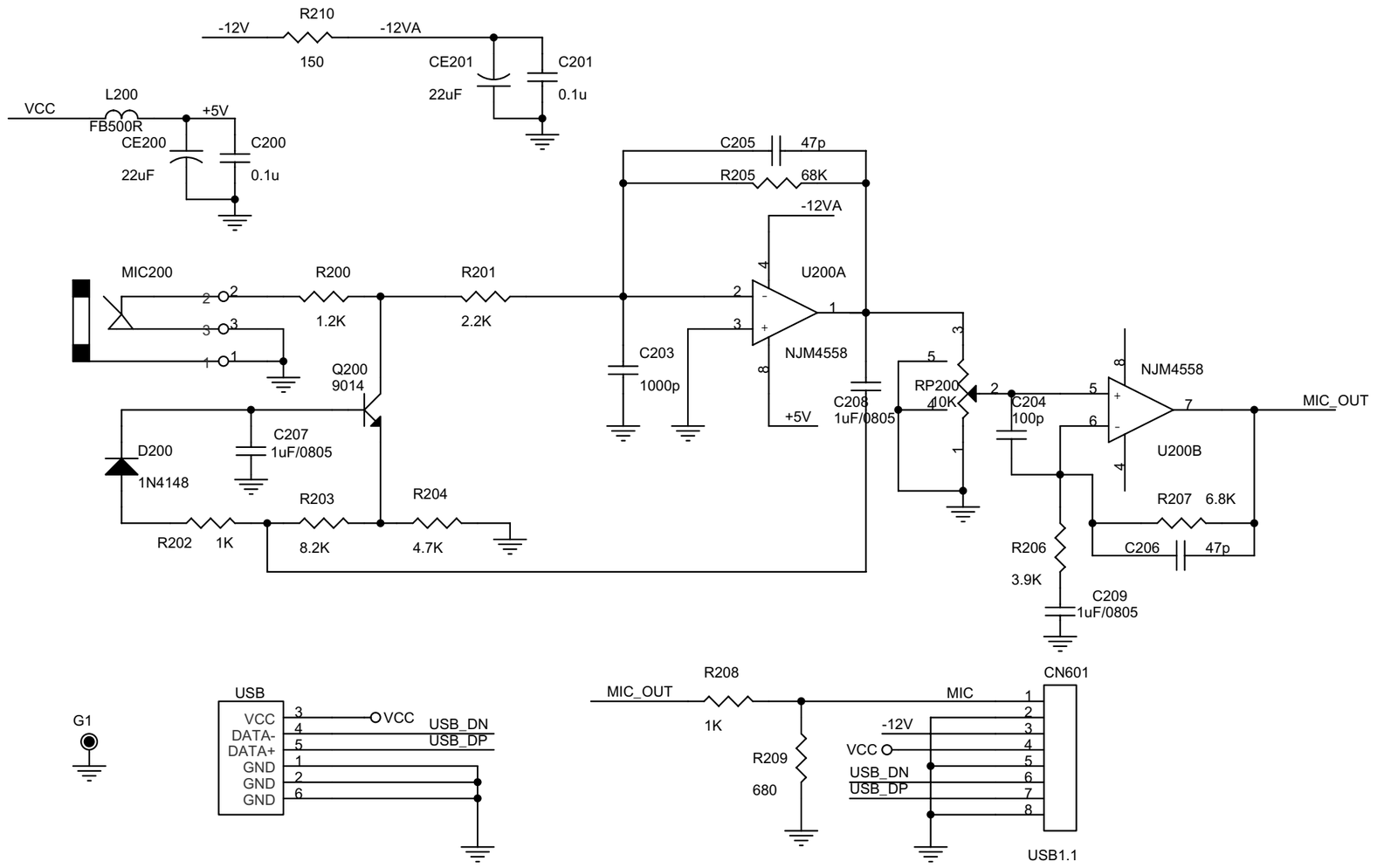
FROM MAIN BOARD



C300	B2
C301	B2
C302	B2
C303	B2
C306	B1
C314	A1
C315	B1
C316	C1
CE300	C2
CE301	B1
CON301	A1
CON302	C1
D301	D2
D302	D2
K302	E3
K303	E2
K304	D2
LED1	E2
R300	B2
R301	B2
R302	B2
R303	B2
R304	B2
R305	B2
R306	C1
R307	C2
R308	C2
R315	B1
REM301	B1
U301	D2

6-2

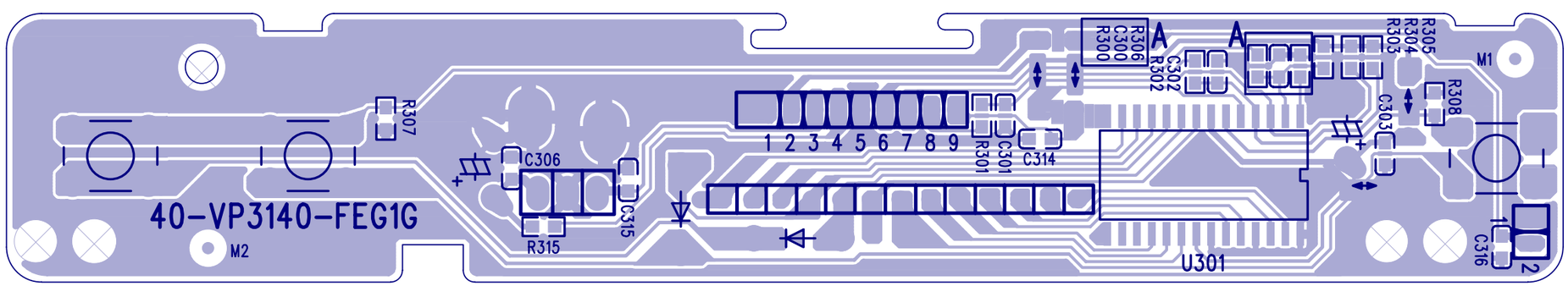
OK Board Electric Diagram for DVP3142K/XX



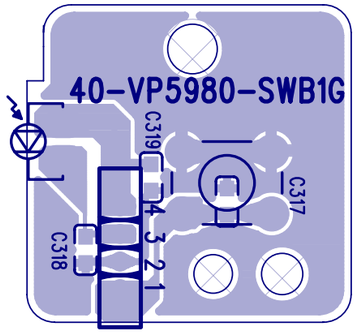
C200	A1
C201	B1
C203	B2
C204	C2
C205	C1
C206	D2
C207	A2
C208	C2
C209	D2
CE200	A1
CE201	B1
CN601	D3
D200	A2
G1	A3
L200	A1
MIC200	A1
Q200	B2
R200	B1
R201	B1
R202	A2
R203	B2
R204	B2
R205	C1
R206	D2
R207	D2
R208	C3
R209	C3
R210	B1
RP200	C2
U200A	C1
U200B	D2
USB	A3

6-3

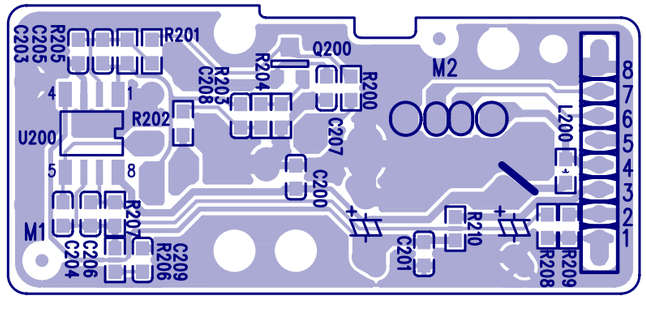
Front Board Print-Layout (Bottom Side) for DVP3140/XX, DVP3142(K)/XX



Switch Board Print-Layout (Bottom Side) for DVP3140/XX, DVP3142(K)/XX

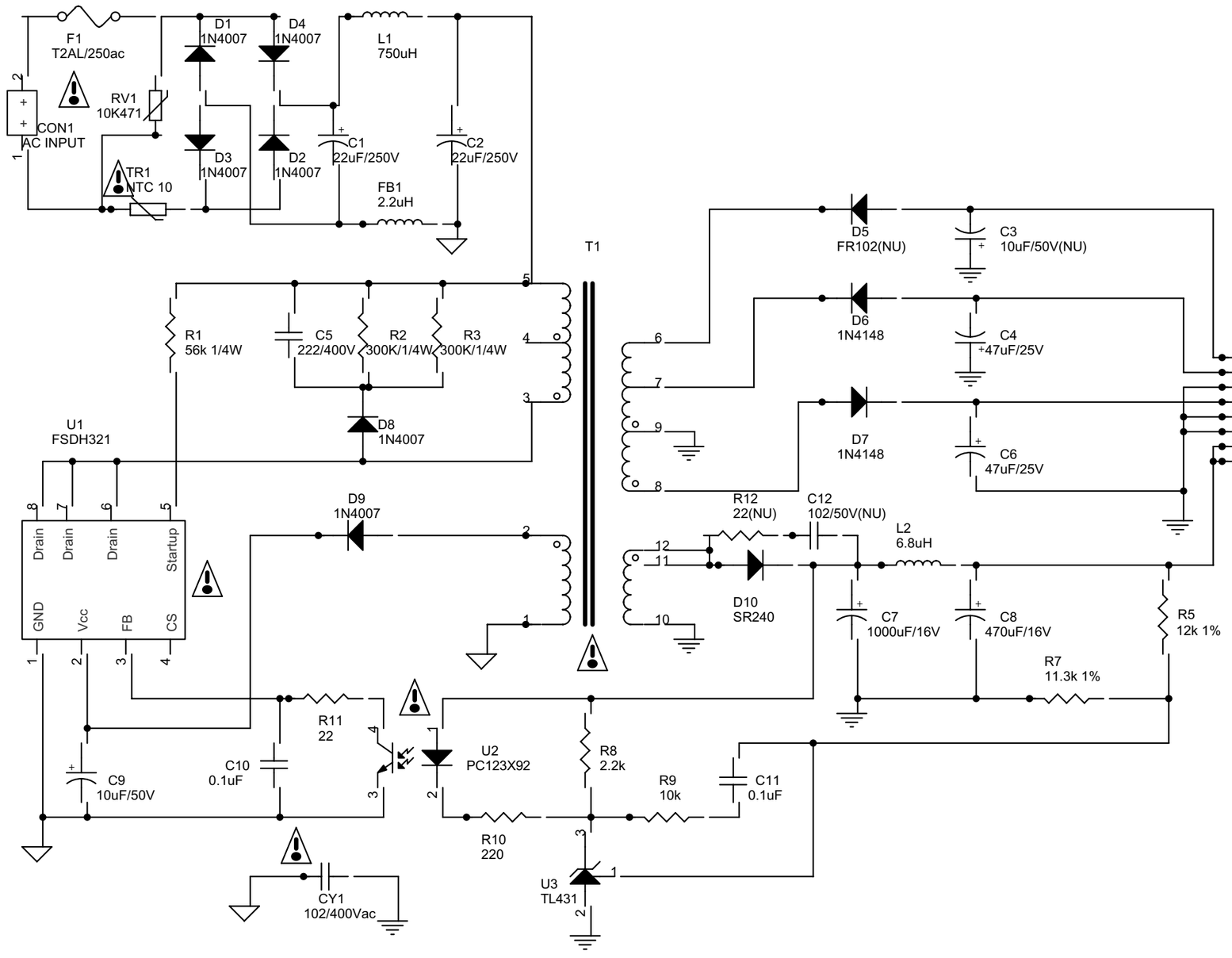


OK Board Print-Layout (Bottom Side) for DVP3142K/XX



6-4

Power Board Electric Diagram for DVP3140/XX, DVP3142K/XX

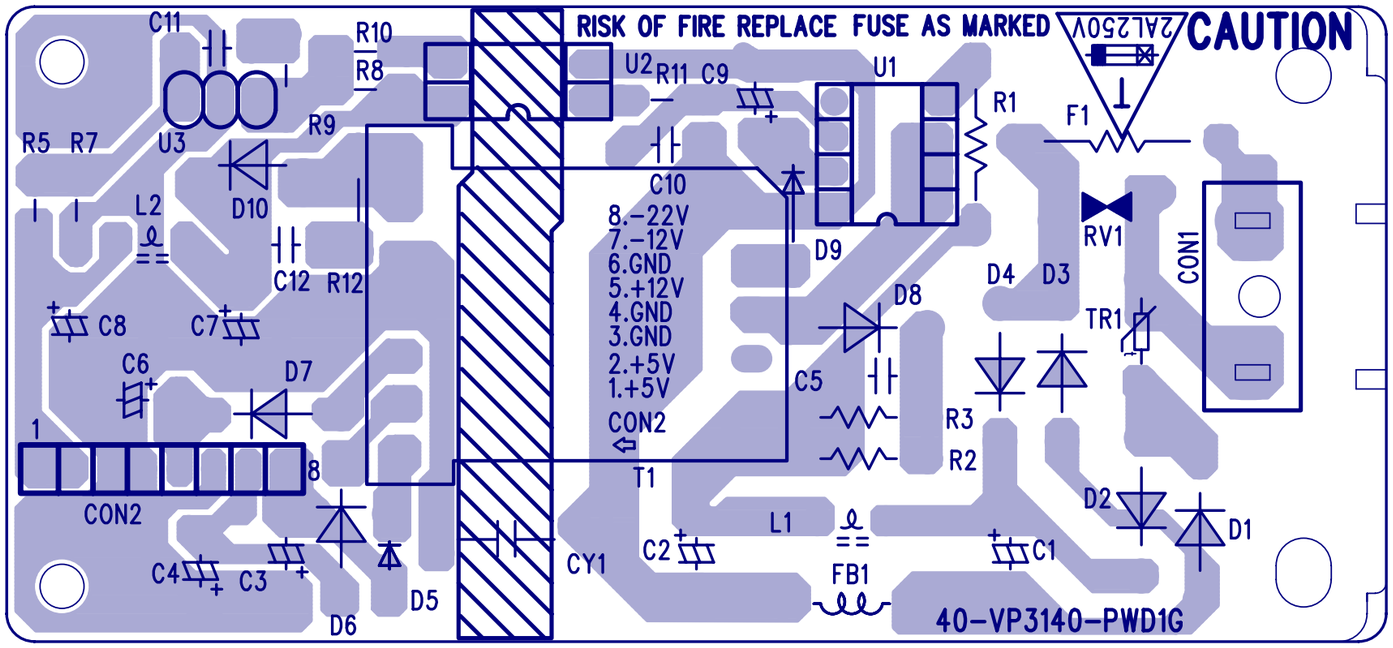


D8	B2
D9	B2
F1	A1
FB1	B1
L1	B1
L2	C3
R1	A2
R10	B3
R11	A3
R12	C2
R2	B2
R3	B2
R5	D3
R7	D3
R8	B3
R9	B3
RV1	A1
T1	B2
TR1	A1
U1	A2
U2	B3
U3	B3
C10	A3
C11	C3
C12	C2
C2	B1
C3	C1
C4	C2
C5	A2
C6	C2
C7	C3
C8	C3
C9	A3
CON1	A1
CON2	D2
CY1	B4
D1	A1
D10	C3
D2	A1
D3	A1
D4	A1
D5	C1
D6	C2
D7	C2

*** CAUTION :**
THE PARTS MARKED WITH ⚠ ARE IMPORTANT PARTS ON THE SAFETY.
PLEASE USE THE PARTS HAVING THE DESIGNATED PARTS NUMBER WITHOUT FAIL.

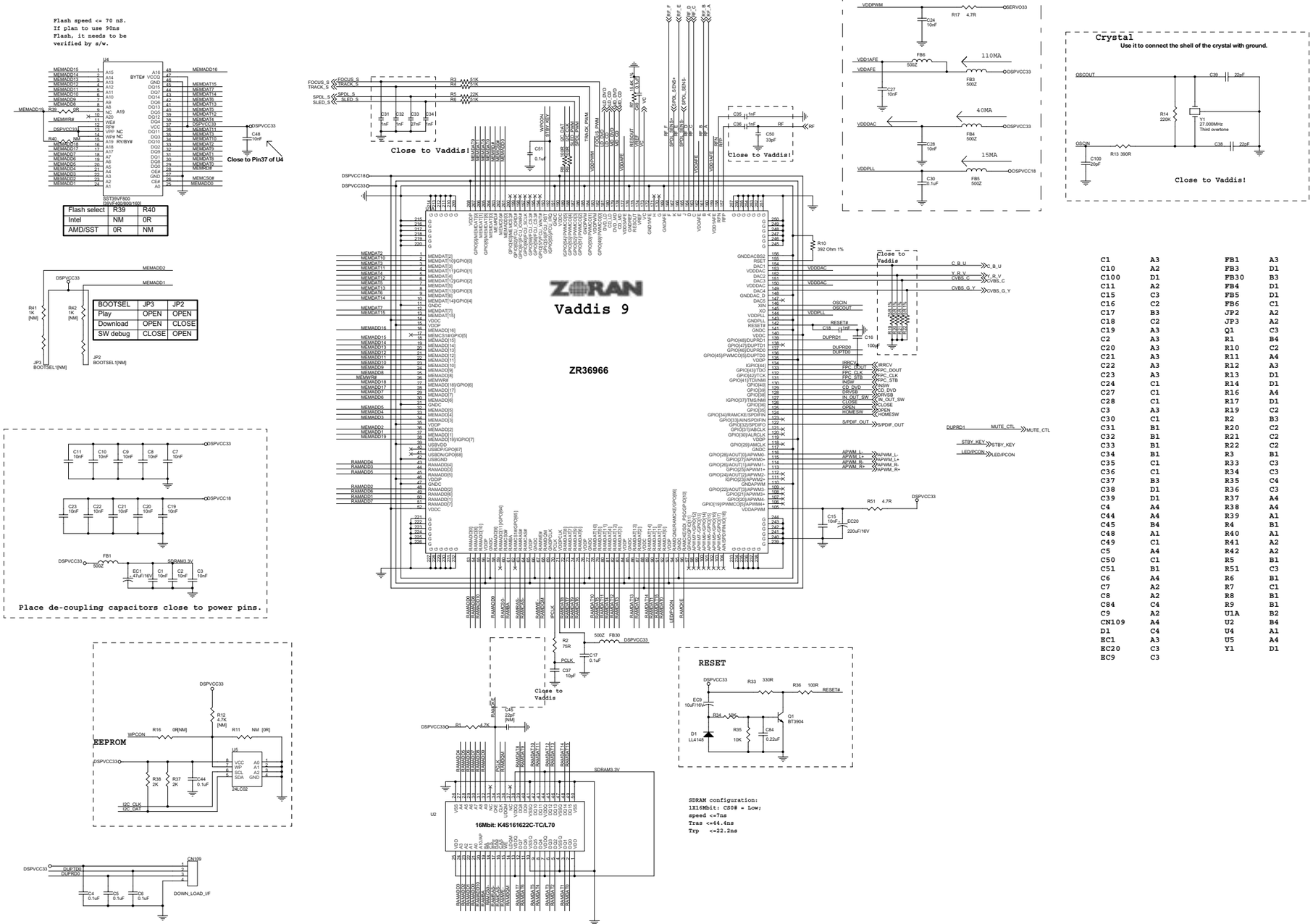
6-5

Power Board Print-Layout (Bottom Side) for DVP3140/XX, DVP3142(K)/XX



6-6

Main Board Electric Diagram for DVP3140/XX: Vaddis_SDRAM_Fla



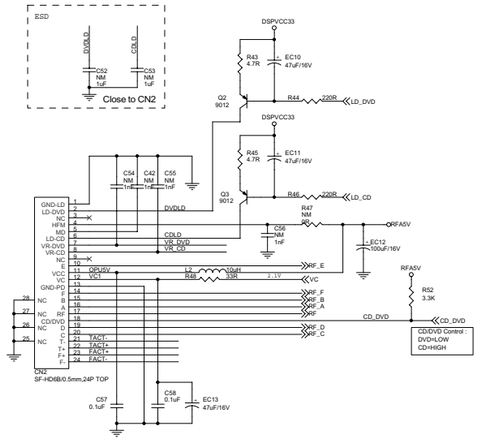
Flash select	R39	R40
Intel	NM	0R
AMD/SST	0R	NM

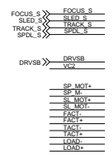
BOOTSEL	JP3	JP2
Play	OPEN	OPEN
Download	OPEN	CLOSE
SW debug	CLOSE	OPEN

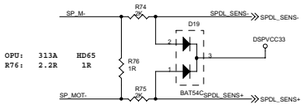
C1	A3	FB1	A3
C10	A2	FB3	D1
C100	D1	FB30	B3
C11	A2	FB4	D1
C15	C3	FB5	D1
C16	C2	FB6	C1
C17	B3	JP2	A2
C18	C2	JP3	A2
C19	A3	Q1	C3
C2	A3	R1	B4
C20	A3	R10	C2
C21	A3	R11	A4
C22	A3	R12	A3
C23	A3	R13	D1
C24	C1	R14	D1
C27	C1	R16	A4
C28	C1	R17	D1
C3	A3	R19	C2
C30	C1	R2	B3
C31	B1	R20	C2
C32	B1	R21	C2
C33	B1	R22	C2
C34	B1	R3	B1
C35	C1	R33	C3
C36	C1	R34	C3
C37	B3	R35	C4
C38	D1	R36	C3
C39	D1	R37	A4
C4	A4	R38	A4
C44	A4	R39	A1
C45	B4	R4	B1
C48	A1	R40	A1
C49	C1	R41	A2
C5	A4	R42	A2
C50	C1	R5	B1
C51	B1	R51	C3
C6	A4	R6	B1
C7	A2	R7	C1
C8	A2	R8	B1
C84	C4	R9	B1
C9	A2	U1A	B2
CN109	A4	U2	B4
D1	C4	U4	A1
EC1	A3	U5	A4
EC20	C3	Y1	D1
EC9	C3		

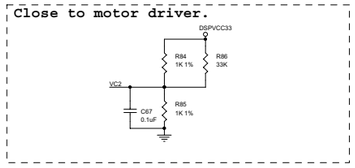
6-7

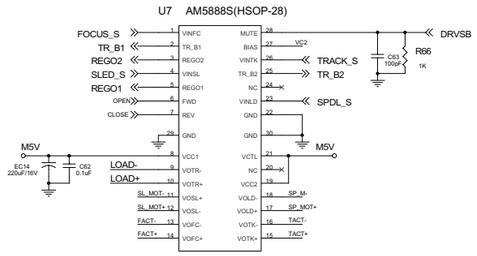
Main Board Electric Diagram for DVP3140/XX: Front end

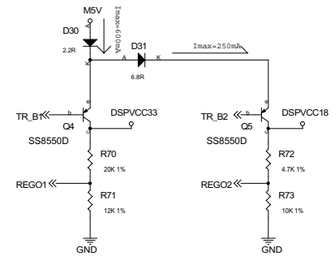


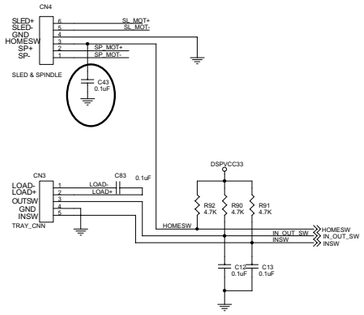








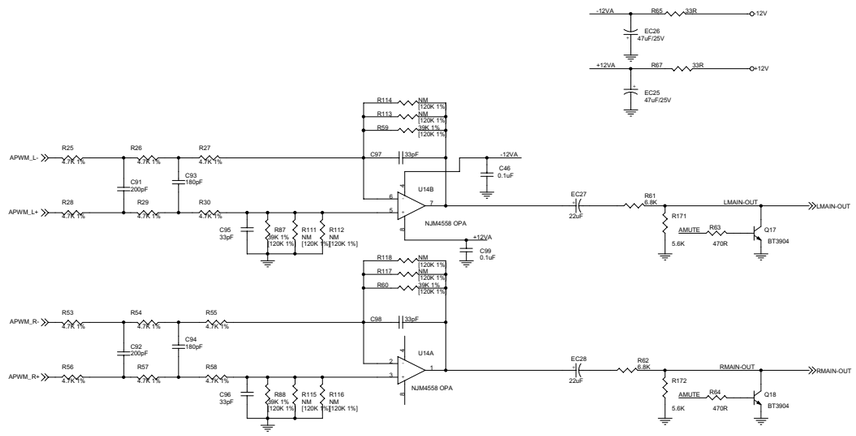


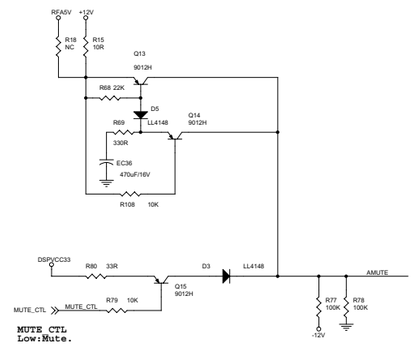


C12	A4
C13	A4
C42	A1
C43	A3
C52	A1
C53	A1
C54	A1
C55	A1
C56	A1
C57	A2
C58	A2
C62	B3
C63	C2
C67	C2
C83	A3
CN2	A1
CN3	A3
CN4	A3
D19	D1
D30	D2
D31	D2
EC10	A1
EC11	A1
EC12	B1
EC13	A2
EC14	B3
L2	A2
Q2	A1
Q3	A1
Q4	D2
Q5	D2
R43	A1
R44	B1
R45	A1
R46	B1
R47	B1
R48	A2
R49	B1
R50	B1
R52	B2
R66	C2
R70	D2
R71	D3
R72	D2
R73	D3
R74	C1
R75	C1
R76	C1
R84	C2
R85	C2
R86	D2
R90	A3
R91	A3
R92	A3
U7	C2

6-8

Main Board Electric Diagram for DVP3140/XX: Audio Input_Outp



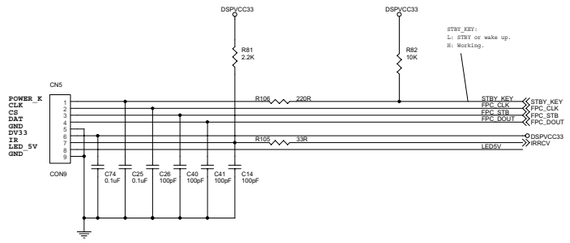


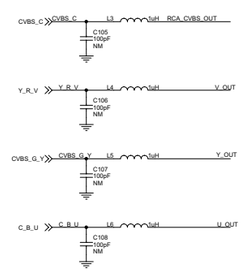
MUTE_CTL
Low:Mute.

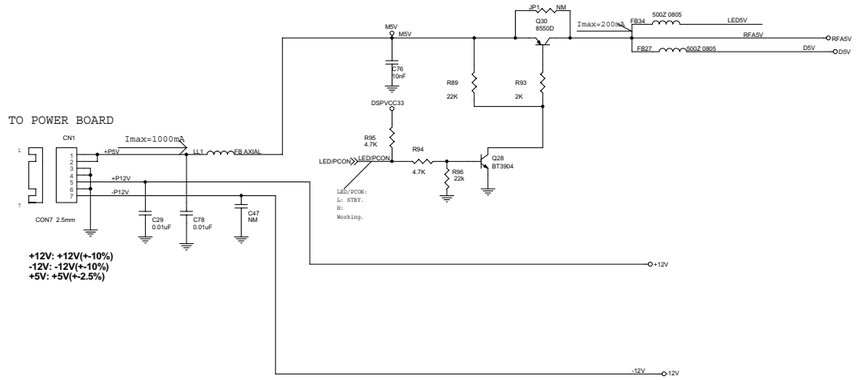
C46	B1
C91	A1
C92	A2
C93	A1
C94	A2
C95	A1
C96	A2
C97	B1
C98	B2
C99	B1
D3	C3
D5	B2
EC25	B1
EC26	B1
EC27	B1
EC28	B2
EC36	B2
Q13	B2
Q14	B2
Q15	B3
Q17	B1
Q18	B2
R108	B3
R111	A1
R112	A1
R113	B1
R114	B1
R115	A2
R116	A2
R117	B1
R118	B1
R15	B2
R171	B1
R172	B2
R18	B2
R25	A1
R26	A1
R27	A1
R28	A1
R29	A1
R30	A1
R53	A2
R54	A2
R55	A2
R56	A2
R57	A2
R58	A2
R59	B1
R60	B1
R61	B1
R62	B2
R63	B1
R64	B2
R65	B1
R67	B1
R68	B2
R69	B2
R77	C3
R78	C3
R79	B3
R80	B3
R87	A1
R88	A2
U14A	B2
U14B	B1

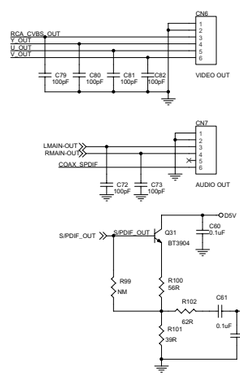
6-9

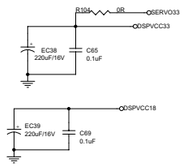
Main Board Electric Diagram for DVP3140/XX: Power_Video Out_







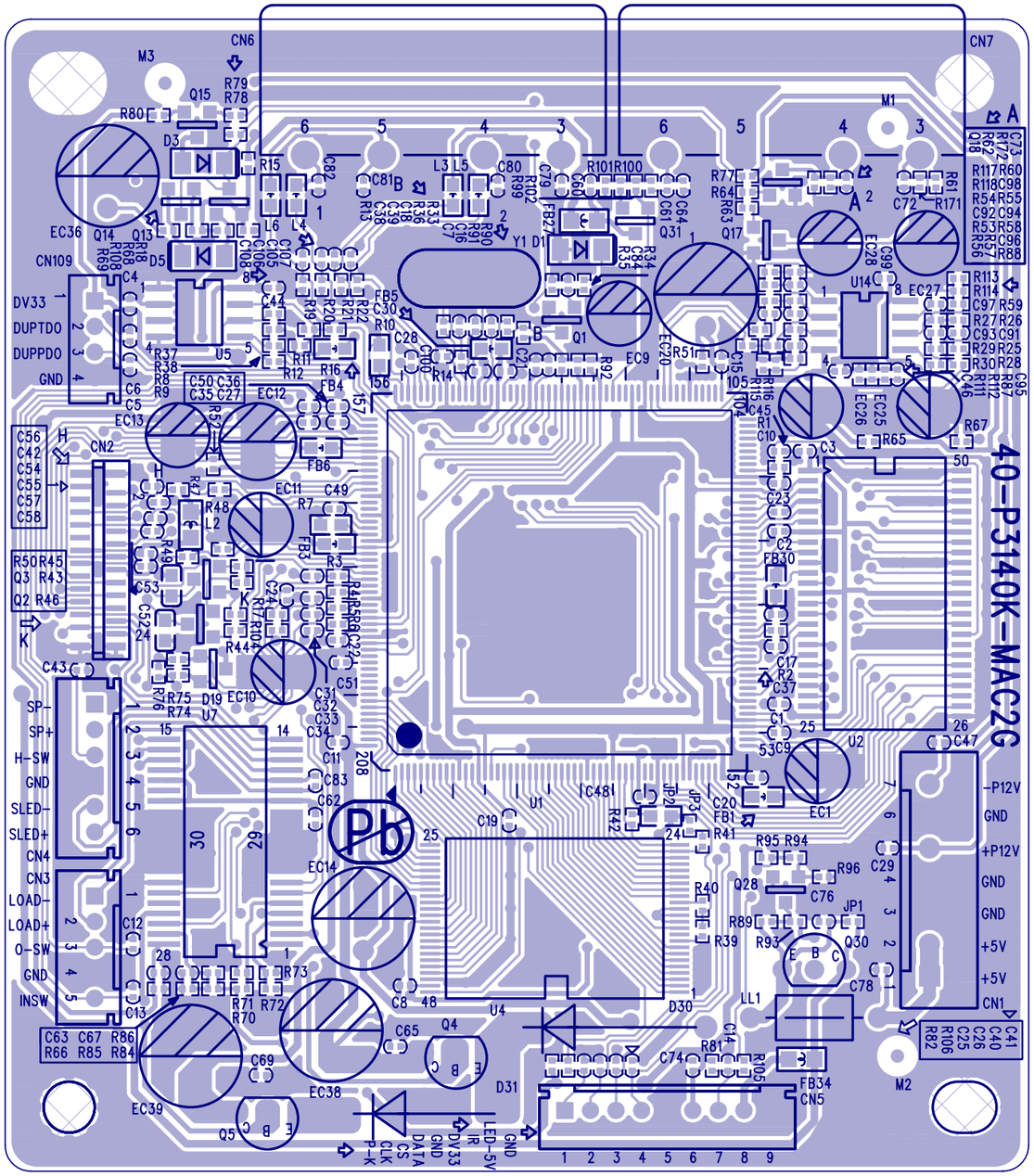




C105	C1
C106	C1
C107	C1
C108	C2
C14	A1
C25	A1
C26	A1
C29	A2
C40	A1
C41	A1
C47	A2
C60	C2
C61	C3
C64	D3
C65	B3
C69	B3
C72	C2
C73	C2
C74	A1
C76	B2
C78	A2
C79	C2
C80	C2
C81	C2
C82	C2
CN1	A2
CN5	A1
CN6	C2
CN7	C2
EC38	B3
EC39	B3
FB27	B2
FB34	B2
JP1	B2
L3	C1
L4	C1
L5	C1
L6	C1
LL1	A2
Q28	B2
Q30	B2
Q31	C2
R100	C3
R101	C3
R102	C3
R104	B3
R105	A1
R106	A1
R81	A1
R82	B1
R89	B2
R93	B2
R94	B2
R95	B2
R96	B2
R99	C3

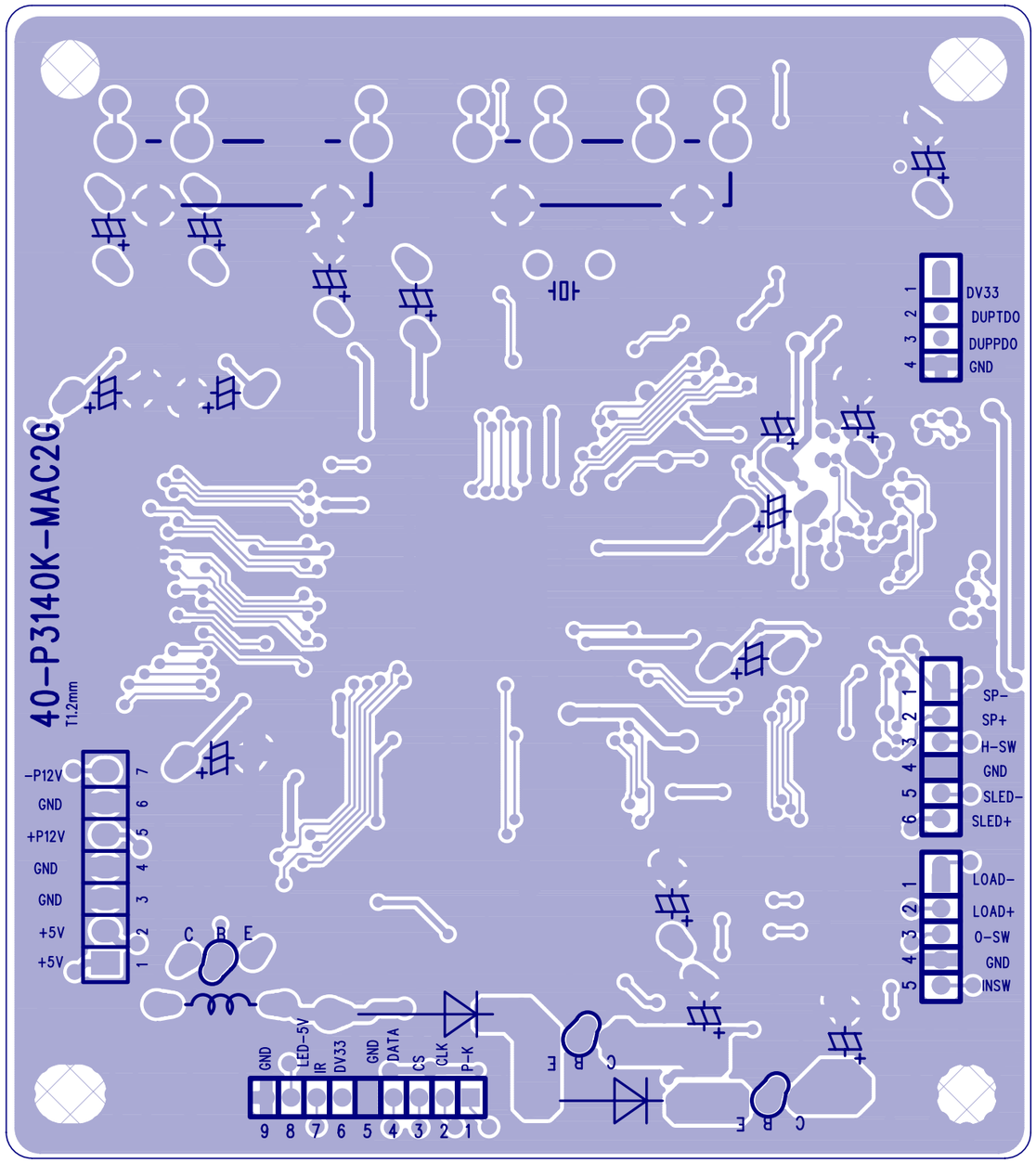
6-10

Main Board Print-Layout (Top Side) for DVP3140/XX



6-11

Main Board Print-Layout (Bottom Side) for DVP3140/XX



6-12

Main Board Electric Diagram for DVP3142(K)/XX: Vaddis_SDRAM_Fla

Flash speed <= 70 nS.
If plan to use 90ns Flash, it needs to be verified by s/w.

Flash select	R39	R40
Intel	NM	0R
AMD/SST	0R	NM

BOOTSEL	JP3	JP2
Play	OPEN	OPEN
Download	OPEN	CLOSE
SW debug	CLOSE	OPEN

Close to Vaddis!

OPU: 313A HD65
R5: 22K 11K
R6: 33K 18K

Important power supply!

Crystal
Use it to connect the shell of the crystal with ground.

RESET

ZORAN
Vaddis 9
ZR36966

SDRAM configuration:
1X16Mbit: CS0# = Low;
1X64Mbit: CS1# = Low; CS0#=BA1
SDRAM speed <=7ns
Tras <=44.4ns
Trp <=22.2ns

Place de-coupling capacitors close to power pins.

EEPROM

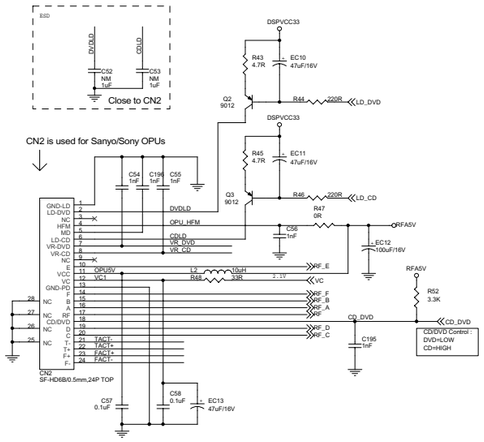
UART

MUX GPIOs

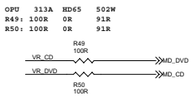
C10	A2	C48	A1	R227	B4
C11	A2	C49	C1	R228	B4
C12	A2	C5	A3	R229	B4
C15	C3	C50	C1	R23	C2
C154	C2	C51	B1	R230	B4
C189	C1	C6	A3	R231	B4
C19	A2	C7	A2	R235	D1
C190	C1	C8	A2	R238	D1
C191	C1	C9	A2	R24	D2
C192	C1	CN10	C4	R244	C2
C193	C1	CN109	C4	R245	C2
C194	C1	D1	E1	R246	C2
C2	A3	EC1	A3	R25	D2
C20	A2	EC20	C3	R26	D2
C201	B3	EC4	C1	R27	D2
C202	C2	EC9	E1	R28	D2
C205	D2	FB1	A3	R3	B1
C206	D1	FB3	D1	R30	C3
C21	A2	FB30	B3	R33	E1
C22	A2	FB4	D1	R34	E1
C23	A2	FB6	C1	R35	E1
C24	C1	FB7	C2	R36	E1
C25	C1	FB8	C2	R37	C4
C26	C1	FB9	C2	R38	C4
C27	C1	JP2	A2	R39	A1
C28	C1	JP3	A2	R4	B1
C29	C1	Q1	E1	R40	A1
C3	A3	R1	A3	R41	A2
C30	C1	R10	C2	R42	A2
C31	B1	R12	D2	R5	B1
C32	B1	R13	D1	R56	C3
C33	B1	R14	D1	R6	B1
C34	B1	R15	D1	R7	B1
C35	C1	R19	C2	R8	B1
C36	C1	R2	B3	R9	B1
C37	B3	R20	C2	U1A	B1
C38	D1	R21	C2	U2	A4
C39	D1	R22	C2	U3	A4
C4	A3	R223	C3	U4	A1
C43	E1	R224	C3	U5	C4
C44	C4	R225	C3	Y1	D1
C45	A3	R226	B4		

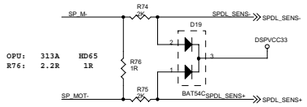
6-13

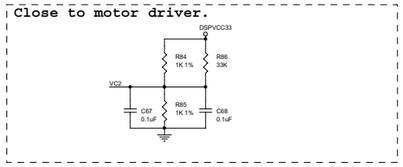
Main Board Electric Diagram for DVP3142(K)/XX: Front end

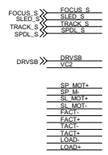


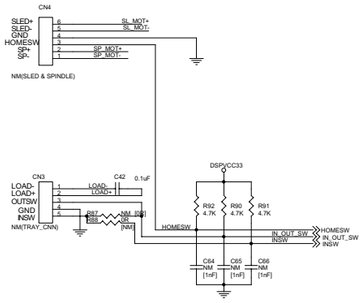
OPU 313A HD65 502W
R49: 100R 0R 91R
R50: 100R 0R 91R

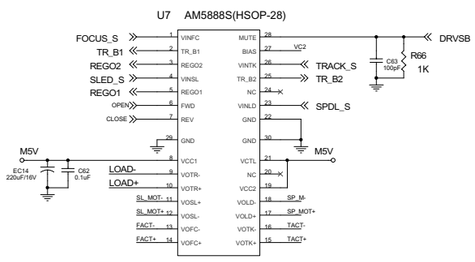


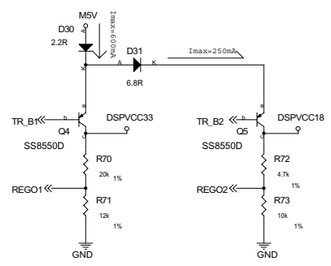








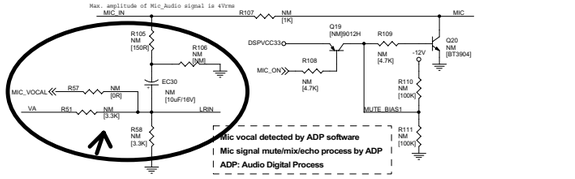


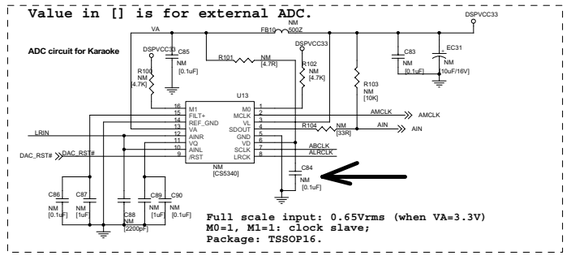


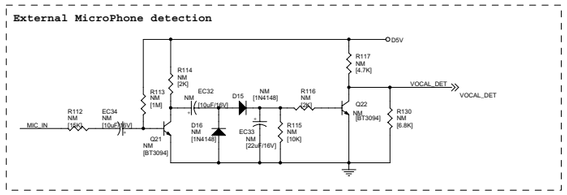
C195	A1
C196	A1
C42	A3
C52	A1
C53	A1
C54	A1
C55	A1
C56	A1
C57	A2
C58	A2
C62	B3
C63	C3
C64	A3
C65	A3
C66	A3
C67	C2
C68	C2
CN2	A1
CN3	A3
CN4	A3
D19	C1
D30	C3
D31	C3
EC10	A1
EC11	A1
EC12	A1
EC13	A2
EC14	B3
L2	A1
Q2	A1
Q3	A1
Q4	C3
Q5	D3
R43	A1
R44	A1
R45	A1
R46	A1
R47	A1
R48	A1
R49	B1
R50	B1
R52	A1
R66	C3
R70	C3
R71	C3
R72	D3
R73	D3
R74	C1
R75	C1
R76	C1
R84	C2
R85	C2
R86	C2
R87	A3
R88	A3
R90	A3
R91	A3
R92	A3
U7	B3

6-14

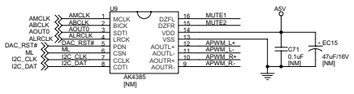
Main Board Electric Diagram for DVP3142(K)/XX: Audio Input_Outp



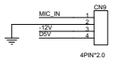


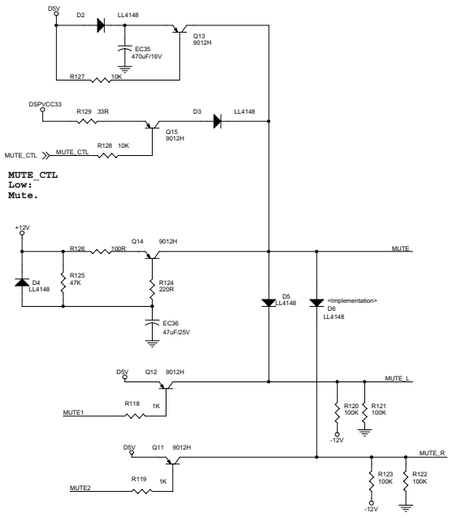


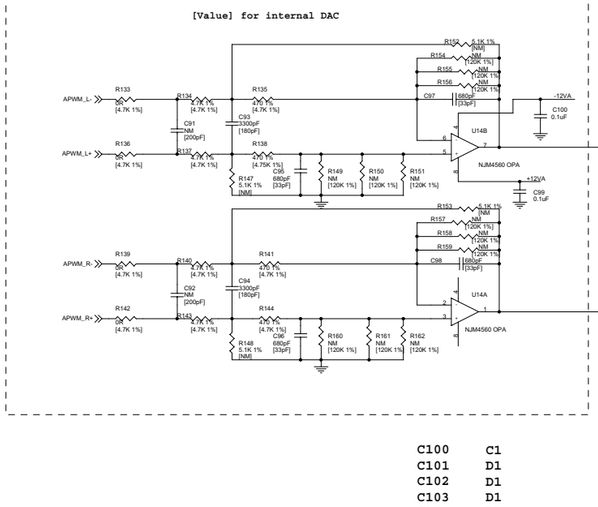
MUTE1 and MUTE2:
Should configuration the DZFB bit to enable High when Zero detected.



Value in [] is for 2 channel external DAC.



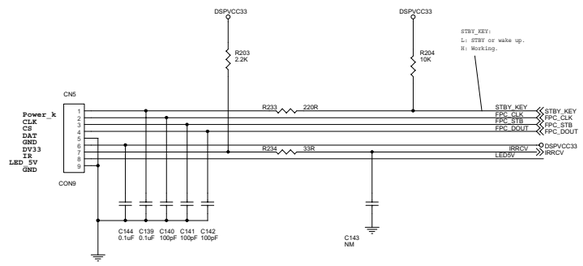


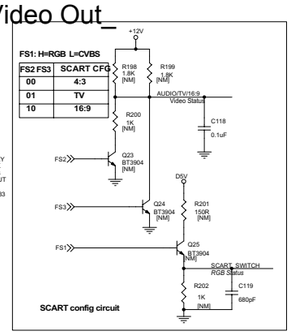


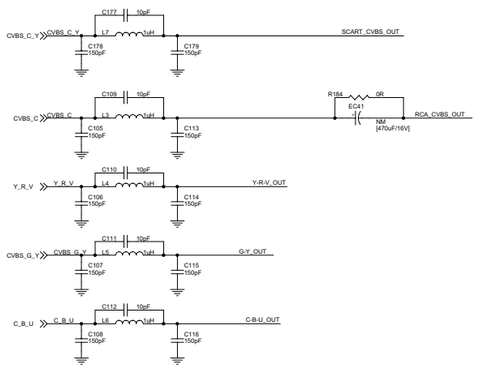
C100	C1	Q15	B3	R147	C1
C101	D1	Q17	E1	R148	C2
C102	D1	Q18	E2	R149	C1
C103	D1	Q19	A1	R150	C1
C104	D2	Q20	B1	R151	C1
C175	E1	Q21	A2	R152	C1
C176	E2	Q22	A2	R153	C1
C71	A3	R100	A1	R154	C1
C83	A1	R101	A1	R155	C1
C84	A2	R102	A1	R156	C1
C85	A1	R103	A1	R157	C1
C86	A2	R104	A1	R158	C1
C87	A2	R105	A1	R159	C1
C88	A2	R106	A1	R160	C2
C89	A2	R107	A1	R161	C2
C90	A2	R108	A1	R162	C2
C91	C1	R109	A1	R163	D1
C92	C2	R110	B1	R164	D2
C93	C1	R111	B1	R165	D1
C94	C2	R112	A2	R166	D2
C95	C1	R113	A2	R167	D1
C96	C2	R114	A2	R168	D1
C97	C1	R115	A2	R169	D1
C98	C1	R116	A2	R170	D2
C99	C1	R117	A2	R171	D1
CN9	A3	R118	B4	R172	D2
D15	A2	R119	B4	R173	E1
D16	A2	R120	B4	R174	E2
D2	B3	R121	B4	R175	D1
D3	B3	R122	B4	R176	D1
D4	B3	R123	B4	R51	A1
D5	B3	R124	B3	R57	A1
D6	B3	R125	B3	R58	A1
EC15	A3	R126	B3	U13	A1
EC25	D1	R127	B3	U14A	C2
EC26	D1	R128	B3	U14B	C1
EC27	D1	R129	B3	U15A	D1
EC28	D2	R130	A2	U15B	D2
EC30	A1	R133	B1	U9	A3
EC31	B1	R134	C1		
EC32	A2	R135	C1		
EC33	A2	R136	B1		
EC34	A2	R137	C1		
EC35	B3	R138	C1		
EC36	B3	R139	B1		
FB10	A1	R140	C1		
Q11	B4	R141	C1		
Q12	B4	R142	B2		
Q13	B3	R143	C2		
Q14	B3	R144	C2		

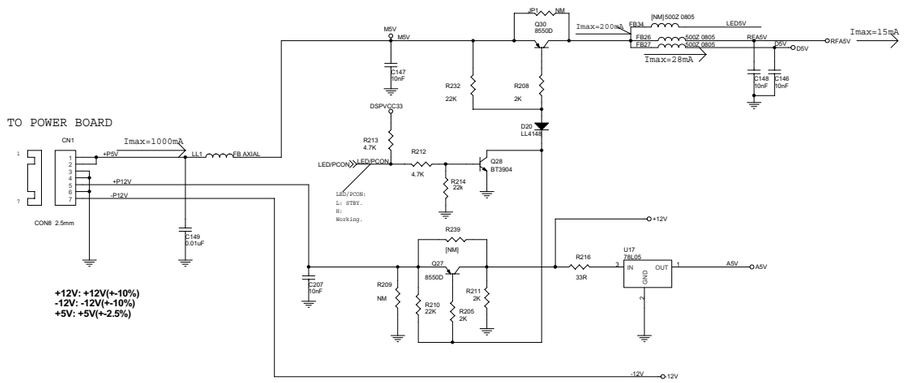
6-15

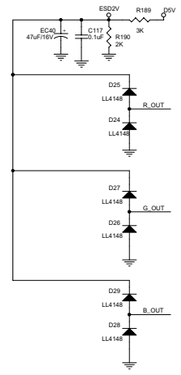
Main Board Electric Diagram for DVP3142(K)/XX: Power_Video Out

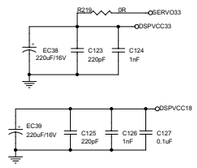


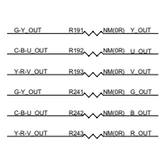


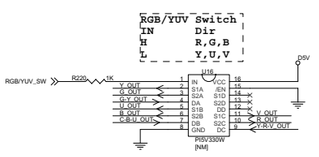


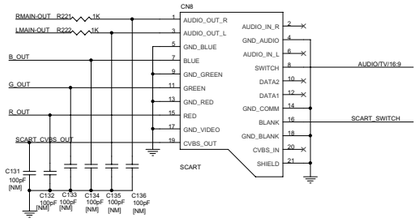


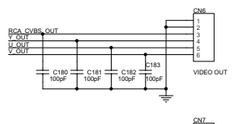


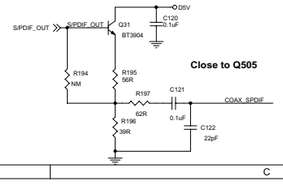








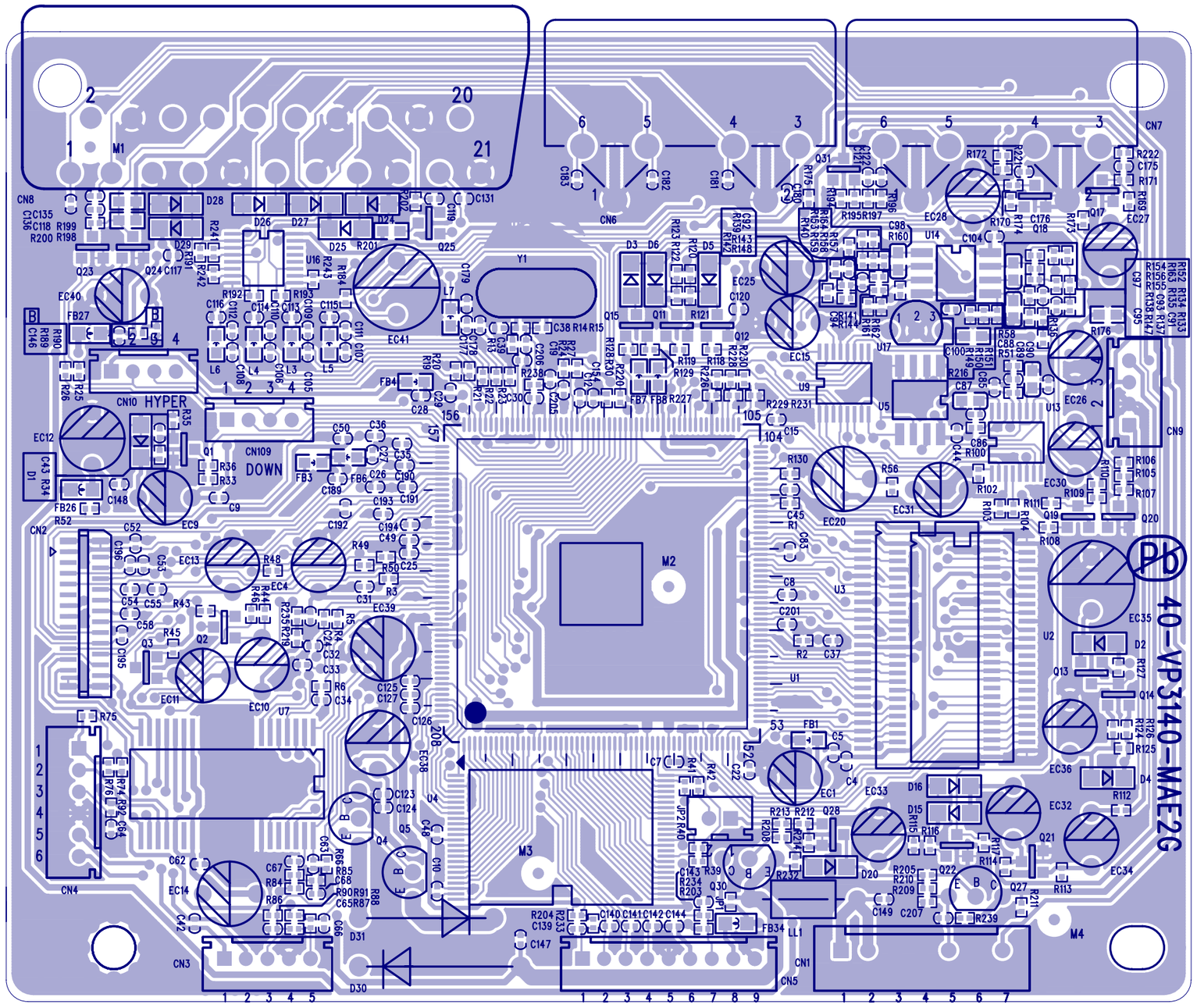




C105	D1	EC39	A3
C106	D1	EC40	C2
C107	D1	EC41	D1
C108	D1	FB26	B2
C109	E1	FB27	B2
C110	E1	FB34	B2
C111	E1	JP1	B2
C112	E1	L3	C1
C113	E1	L4	C1
C114	E1	L5	C1
C115	E1	L6	C1
C116	E1	L7	C1
C117	D2	LL1	A2
C118	C1	Q23	B1
C119	C1	Q24	B1
C120	D3	Q25	B1
C121	D3	Q27	B2
C122	D3	Q28	B2
C123	A2	Q30	B2
C124	A2	Q31	B4
C125	A3	R184	D1
C126	A3	R189	C2
C127	A3	R190	C2
C131	A3	R191	A3
C132	A3	R192	A3
C133	A3	R193	A3
C134	A3	R194	B4
C135	A3	R195	B4
C136	A3	R196	B4
C139	A1	R197	B4
C140	A1	R198	B1
C141	A1	R199	B1
C142	A1	R200	B1
C143	B1	R201	B1
C144	A1	R202	B1
C146	C2	R203	A1
C147	B2	R204	A1
C148	C2	R205	B2
C149	A2	R208	B2
C177	E1	R209	B2
C178	D1	R210	B2
C179	E1	R211	B2
C180	C3	R212	B2
C181	C3	R213	A2
C182	C3	R214	B2
C183	C3	R216	B2
C207	B2	R219	A3
CN1	A2	R220	B3
CN5	A1	R221	A3
CN6	D3	R222	A3
CN7	D3	R232	B2
CN8	A3	R233	A1
D20	C2	R234	A1
D24	E2	R239	B2
D25	E2	R240	B4
D26	E2	R241	A3
D27	E2	R242	A3
D28	E2	R243	A3
D29	E2	U16	B3
EC38	A2	U17	B2

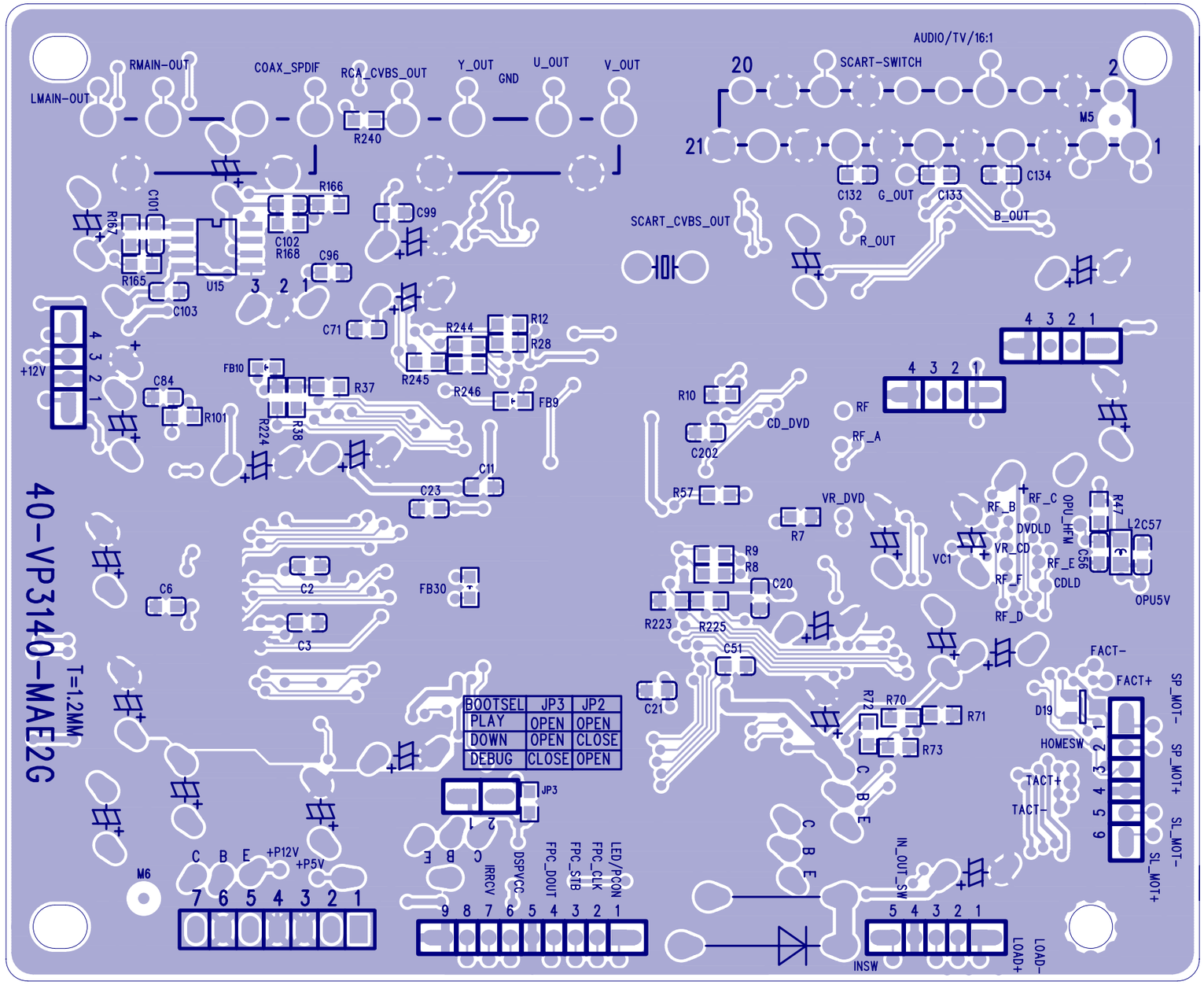
6-16

Main Board Print-Layout (Top Side) for DVP3142(K)/XX

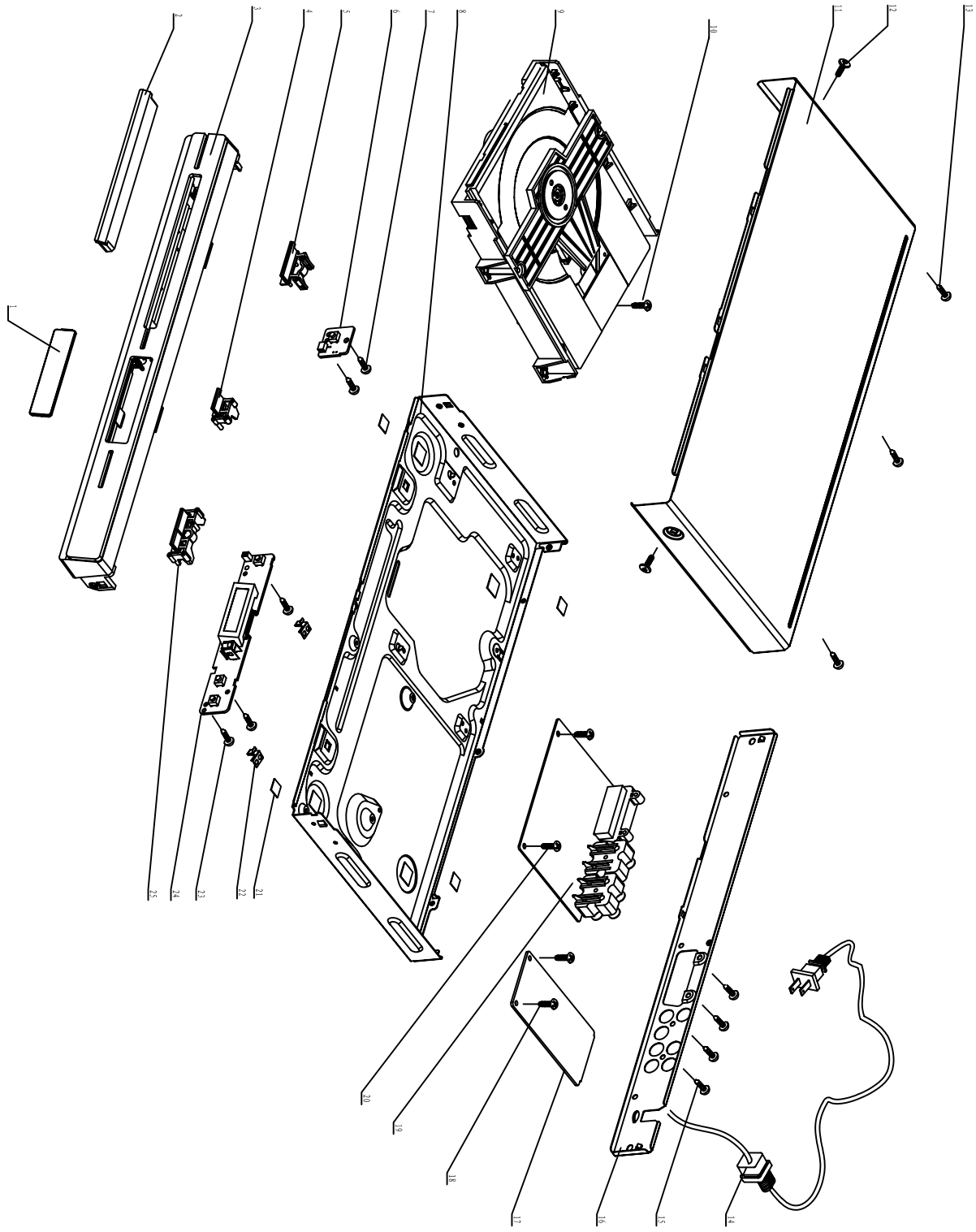


6-17

Main Board Print-Layout (Bottom Side) for DVP3142(K)/XX



DVP3140/XX,DVP3142/XX Mechanical Exploded View



Remark: It's a general Mechanical Exploded View for DVP3140/XX,DVP3142/XX, Detailed information please refer to Model set.

Ass'y1 is the assembled component for location1,3,4,5,25

ENCASING & ACCESSORIES PARTS LIST

No	12NC No.	Part Name	Q'ty
Ass'y1	996510001174	Front panel Ass'y	1
2	996510001173	Front door Ass'y	1
6	996510001163	Ass'y-Switch Board	1
8	996510001177	Bottom Cabinet	1
9	996510001166	Loader for DVP3142/51/55/12	1
	/	Loader for DVP3140/37	
11	996510001178	Top cover	1
	/	Power cord for DVP3142/5/12	
14	996510001175	Power cord for DVP3142/55	1
	/	Power cord for DVP3140/37	
	/	Rear Cabinet for DVP3142/51	
16	996510001176	Rear Cabinet for DVP3142/55	1
	/	Rear Cabinet for DVP3142/12	
	/	Rear Cabinet for DVP3140/37	
	/	A'ssy-Power Board for DVP3142/51/12	
17	996510001165	A'ssy-Power Board for DVP3142/55	1
	/	A'ssy-Power Board for DVP3140/37	
	996510001162	A'ssy-Main Board for DVP3142/51/55	
19	/	A'ssy-Main Board for DVP3142/12	1
	/	A'ssy-Main Board for DVP3140/37	
21	/	Pad	4
22	/	Earthing Plate	1
24	996510001164	A'ssy-Front Board	1

Accessory

RC	996500034176	REMOTE CONTROL	1
AV	996510001106	AUDIO/VIDEO CABLE 1500mm	1

Cable

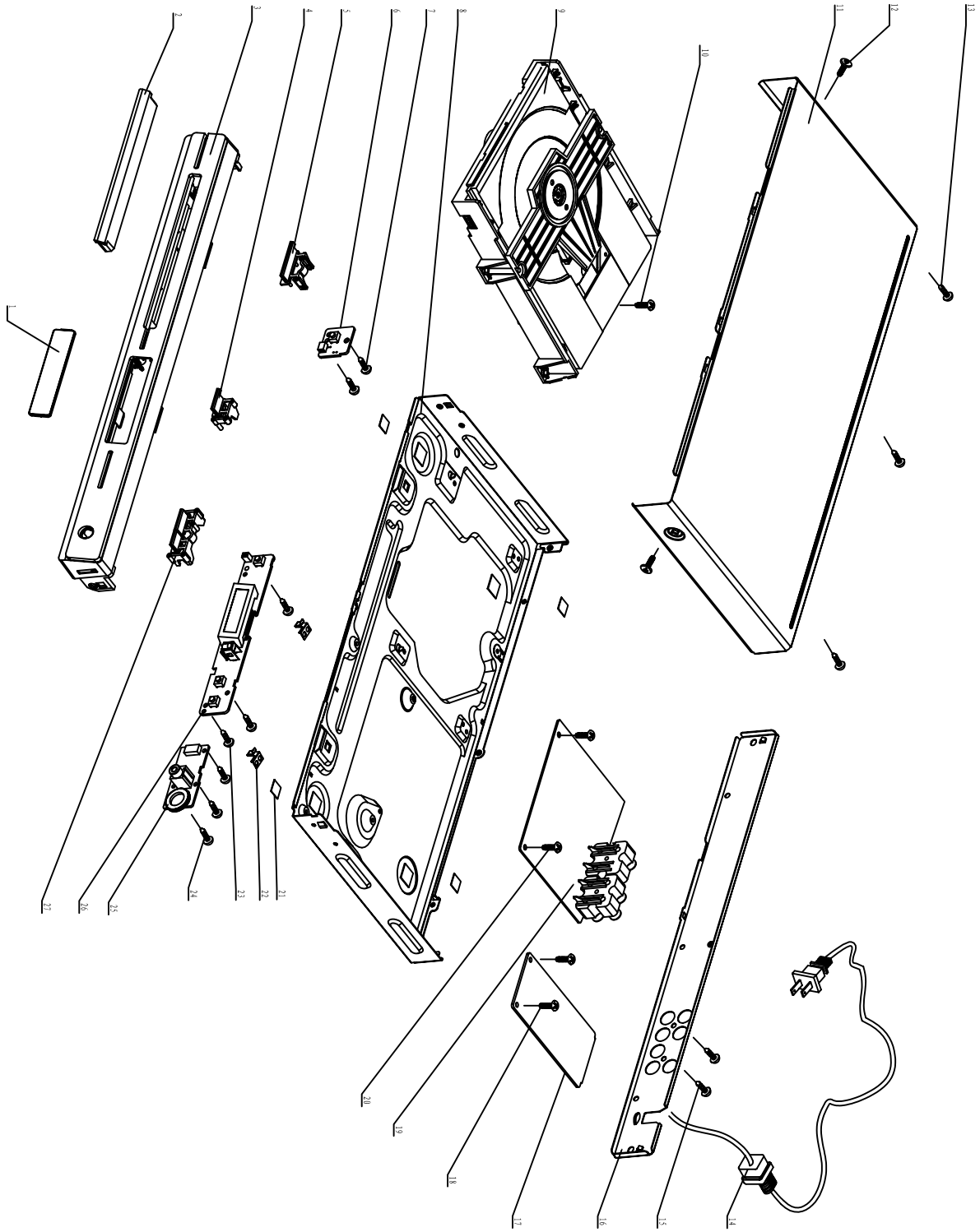
CN3	996510001167	HS 5P 20080#26 110mm PH-5Y*2	1
CN2	996510001168	CONNECTOR 24PIN HS	1
CN1	996510001169	TJC3-7Y/SCN-7P L=80MM	1
CN4	996510001170	CONNECTOR 6PIN	1
C0N302	996510001171	2P HS CONNECTOR 2P	1
CON301	996510001172	CONNECTOR 9PIN	1

Note:Only the parts mentioned in this list are normal service spare parts

SCREW LIST

No	12NC No.	Part Name	Q'ty
7	/	S/T Screw B 2.6 X 8 BF	2
10	/	Machine Screw	4
12	/	M/C Screw Triangle W 3 X 6	2
13	/	Triangle M/C Screw B 3 X 6	3
15	/	Triangle M/C Screw B 3 X 6	2
18	/	Triangle M/C Screw B 3 X 6	3
20	/	Triangle M/C Screw B 3 X 6	3
23	/	S/T Screw B 2.6 X 8 BF	2
24	/	S/T Screw B 2.6 X 8 BF	2

DVP3142K/XX Mechanical Exploded View



Remark: It's a general Mechanical Exploded View for DVP3142K/XX,Detailed information please refer to Model set.

Ass'y1 is the assembled component for location1,3,4,5,27

ENCASING & ACCESSORIES PARTS LIST

No	12NC No.	Part Name	Q'ty
Ass'y1	996510001186	Front panel Ass'y	1
2	996510001185	Front door Ass'y	1
6	996510001163	Ass'y-Switch Board	1
8	996510001177	Bottom Cabinet	1
9	996510001166	Loader	1
11	996510001178	Top cover	1
14	996510001175	Power cord	1
16	996510001176	Rear Cabinet	1
17	996510001182	A'ssy-Power Board	1
19	996510001181	A'ssy-Main Board	1
21	/	Pad	4
22	/	Earthing Plate	1
25	996510001183	A'ssy-OK Board	1
26	996510001164	A'ssy-Front Board	1

Accessory

RC	996500034181	REMOTE CONTROL	1
AV	996510001106	VIDEO CABLE 1500mm	1

Cable

CN3	996510001167	HS 5P 20080#26 110mm PH-5Y*2	1
CN2	996510001168	CONNECTOR 24PIN HS	1
CN1	996510001169	TJC3-7Y/SCN-7P L=80MM	1
CN4	996510001170	CONNECTOR 6PIN HS	1
C0N302	996510001171	2P HS CONNECTOR 2P	1
CON301	996510001172	HS 9PIN CONNECTOR	1
CN601	996510001184	4P HS CONNECTOR 4PIN	1

SCREW LIST

No	12NC No.	Part Name	Q'ty
7	/	S/T Screw B 2.6 X 8 BF	2
10	/	Machine Screw	4
12	/	M/C Screw Triangle W 3 X 6	2
13	/	Triangle M/C Screw B 3 X 6	3
15	/	Triangle M/C Screw B 3 X 6	2
18	/	Triangle M/C Screw B 3 X 6	2
20	/	Triangle M/C Screw B 3 X 6	2
23	/	S/T Screw B 2.6 X 8 BF	3
24	/	S/T Screw B 2.6 X 8 BF	3

Note:Only the parts mentioned in this list are normal service spare parts

REVISION LIST

Version 1.0
* Initial release

Remark: This Service manual only for Philips Service repairment, Please Don't transmitte or forward it to others.